DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
450 110th Ave NE., P.O. BOX 90012
BELLEVUE, WA 98009-9012

OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No. 20-109547-LO

Project Name/Address: COBU Factoria Conveyance Improvements

Planner: Peter Rosen

Phone Number: 425-452-5210

Minimum Comment Period: July 9, 2020

Materials included in this Notice:

☒ Blue Bulletin
☒ Checklist
☒ Vicinity Map
☒ Plans
☐ Other:

OTHERS TO RECEIVE THIS DOCUMENT:
☒ State Department of Fish and Wildlife / Sterwart.Reinbold@dfw.gov; Christa.Heller@dfw.wa.gov;
☒ State Department of Ecology, Shoreline Planner N.W. Region / Jobu461@ecy.wa.gov; sepaunit@ecy.wa.gov
☒ Army Corps of Engineers Susan.M.Powell@nws02.usace.army.mil
☐ Attorney General ecyolyef@atg.wa.gov
☒ Muckleshoot Indian Tribe Karen.Walter@muckleshoot.nsn.us; Fisheries.fileroom@muckleshoot.nsn.us

VICINITY MAP

DEVELOPMENT SERVICES DEPARTMENT
450 110TH AVENUE NE
BELLEVUE, WA 98009-9012

Environmental Checklist reviewed by Peter Rosen (PR) 6/17/2020

SEPA Environmental Checklist

If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit the Land Use Desk in the Permit Center between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4) or call or email the Land Use Division at 425-452-4188 or landusereview@bellevuewa.gov. Assistance for the hearing impaired: Dial 711 (Telecommunications Relay Service).

Purpose of checklist:
The City of Bellevue uses this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:
This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use “not applicable” or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies and reports. Please make complete and accurate answers to these questions to the best of your ability in order to avoid delays.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The City may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

PLEASE REMEMBER TO SIGN THE CHECKLIST. Electronic signatures are also acceptable.

A. Background [help]

1. Name of proposed project, if applicable: [help]
   Factoria Boulevard Stormwater Conveyance Improvement

2. Name of applicant: [help]
   Birol Shaha

3. Address and phone number of applicant and contact person: [help]
   City of Bellevue
   450 110th Avenue NE
   Bellevue WA 98009
   425-452-4477

4. Date checklist prepared: [help]
   March 25, 2020

5. Agency requesting checklist: [help]
   City of Bellevue

6. Proposed timing or schedule (including phasing, if applicable): [help]
   Construction is expected to begin in 2021 and completed in 2022. Construction phasing will likely include outfall replacement in 2021 with the storm trunk, inlets, laterals and mitigation activities in 2022.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. [help]
   No

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [help]
   Critical Areas Report, Biological Assessment, Geotechnical Report and Conceptual Mitigation Plan

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. [help]
   There are no permits being actively reviewed for this proposal.

10. List any government approvals or permits that will be needed for your proposal, if known. [help]
    Federal:
    CWA Section 404 (US Army Corps of Engineers)
    Endangered Species Act and Magnuson-Stevens Act
    CWA Section 401 Water Quality Certification (Ecology)
    State:
    Hydraulic Project Approval (WDFW)
    SEPA (City)
    City of Bellevue:
    Critical Areas/Land Use Permit
    Grading and Drainage Permit

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Right-of-Way

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.) [help]
The proposed project is a stormwater conveyance improvement that includes, replacement of the existing outfall in Richards Creek, replacement of main trunk line, addition of storm inlets and laterals along Factoria Boulevard. The project includes compensatory mitigation for permanent and temporary impacts to Richards Creek. The project site in total is approximately 1.3 acres in size.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. [help]
The site is located adjacent to Factoria Village and Richards Creek. The site is in Township 25, Range 5E, and Section 9. Vicinity map is attached.

B. Environmental Elements [help]

1. Earth [help]

a. General description of the site: [help] (select one): ☒Flat, ☐rolling, ☐hilly, ☐steep slopes, ☐mountainous, other: *The project site is generally flat except for the slopes on the stream channel.*

b. What is the steepest slope on the site (approximate percent slope)? [help]
40% slope from the edge of pavement to the stream channel.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [help]
Soil type is generally described as primarily looses to medium dense stratified sand and gravel with varying percentages of silt and clay. No agricultural land is within the project area.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [help]
A potential for a few inches of ground settlement during a moderate to large earthquake were noted in the geotechnical

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report prepared by GeoEngineers Inc.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [help]
All areas and volumes are approximations:
Excavation from stormwater conveyance improvement;
Area:15,000 square feet
Volume: 4,600 cubic yards
Excavation from outfall replacement and stream channel enhancements;
Area: 19,000 square feet
Volume: 975 cubic yards
Fill will be obtained from an approved sources

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [help]
Yes, any exposure from excavation/filling of soil has potential for erosion. However, BMP's will be followed and TESC plans will be developed and followed for this application

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? [help]
The percent of impervious area for the project site will be approximately 72%. There will only be an approximate increase of 1,100 square feet to the 1.3 acre site from this project.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [help]
Measures to reduce erosion may include using filter fabric, silt fence, plastic covering, sodding, sediment bags, mulching, and/or soil stabilization. Seeding and revegating construction areas, employing inlet protection, and sweeping roadways after construction.

Project will comply with erosion and sediment controls per BCC 23.76

2. Air [help]

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [help]
During initial construction, heavy equipment would be emissions sources and small amounts of dust from earthmoving. No other air emissions would be expected through operation and maintenance.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [help]
Work is close to a busy street so vehicle emissions are expected in the immediate area.

c. Proposed measures to reduce or control emissions or other impacts to air, if any: [help]
Limiting the amount of bare, dry soil and minimizing idling on

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heavy equipment

3. Water [help]

a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. [help]

Richards Creek is classified as a Type F fish-bearing stream

Yes, there is Richard Creek, which flows into Kelsey Creek, and then into the Mercer Slough and into Lake Washington.

Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. [help]

Yes, the proposed outfall and trunk line replacement will require work within Richards Creek.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. [help]

Project activities will occur in Richards Creek, including the stream enhancements and are approximate quantities are:
Excavated Material: 75 cubic yards,
Fill Material: 15 cubic yards
The total area of work under OHWM is 2,525 Square feet.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [help]

Yes, existing stormwater in the conveyance system will be diverted around the project area and into Richards Creek during the construction window. Flows from upstream of the project site will be bypassed through the use of either a gravity-flow bypass system or pumped from vaults/catchbasins upstream of the project site and realeased in a non-erosive manner into Richards Creek. Approximate quantities are unknown as precipitation is the main component of the diversion but the basin encompasses approximately 283 acres of 64% impervious surface.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. [help]

No, the portion of the project encompassing the Richards Creek channel is not within the FEMA mapped floodplain.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. [help]

No waste materials are anticipated to be discharged to surface waters in this proposal.

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b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [help]
No wells are associated with this project so withdrawals or discharges to groundwater are not expected from this proposal.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals…; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. [help]
No waste material will be discharged into the ground from any sources for this project.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. [help]
Upstream flow in the storm drain system replacement proposed in this project includes approximately 283 acres of 64% impervious surface from neighboring commercial business and residential areas. This will be collected by either gravity-flow bypass and/or pumps from vaults/catchbasins. The water will be discharged into the inlet of Richards Creek in a non-erosive manner.

2) Could waste materials enter ground or surface waters? If so, generally describe. [help]
Yes, as accidental spills or leaks from equipment may happen. BMP's will be employed to take corrective actions including, beginning containment and cleanup efforts immeadiately and completing them expeditiously according to all local, state, and federal regulations, and ensuring they take precedence over ordinary work. Cleanup will include proper disposal of any spilled material and used cleanup material. Spills will be reported to Washington State Department of Ecology's (Ecology) Southwest Regional Spill Response Office at 360-407-6300.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe. [help]
The project aims to increase the drainage rates to reduce flooding but the drainage rates will not be altered and still be entering into Richards Creek.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage

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To control runoff, project will comply with erosion and sediment controls per BCC 23.76

pattern impacts, if any: [help]

There will be no need for these measures as no major changes to the projects drainage patterns are anticipated after the project is complete.

4. Plants [help]

a. Check the types of vegetation found on the site: [help]

☐deciduous tree: alder, maple, aspen, other: *Click here to enter text.*

☐evergreen tree: fir, cedar, pine, other: *Click here to enter text.*

☒shrubs

☐grass

☐pasture

☐crop or grain

☐Orchards, vineyards or other permanent crops.

☐wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other: *Click here to enter text.*

☐water plants: water lily, eelgrass, milfoil, other: *Click here to enter text.*

☒other types of vegetation: *Various ornamental species are present on the periphery of the site adjacent to businesses.*

b. What kind and amount of vegetation will be removed or altered? [help]

All vegetation (Himalyan Blackberry) adjacent to the channel will be removed and encompasses approximately 0.4 acres.

c. List threatened and endangered species known to be on or near the site. [help]

No threatened or endangered species and critical habitats are known to occur on the site from a review of the Washington Department of Fish and Wildlife Priority Habitats and Species (PHS) Tool.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [help]

A general description of the proposed native vegetation is included in the current design plan and proposes native riparian and upland species, but a vegetation management plan will be developed and approved by the City of Bellevue prior to the project start.

Proposal will enhance the stream buffer of Richards Creek within the project area with native trees and shrubs

e. List all noxious weeds and invasive species known

Himalayan Blackberrry

5. Animals [help]

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. [help]

Examples include:

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birds: ☐hawk, ☐heron, ☐eagle, ☒songbirds, other: *Click here to enter text.*
mammals: ☐deer, ☐bear, ☐elk, ☐beaver, other: *Click here to enter text.*
fish: ☐bass, ☒salmon, ☐trout, ☐herring, ☐shellfish, other: *Lamprey*

b. List any threatened and endangered species known to be on or near the site. [help]
According to a SalmonScape review, both Steelhead and Salmon are located downstream of the project site in Richards Creek. However, the culvert under I-90 at the end of the project site is a partial barrier to fish passage and the upstream culvert prevents fish passage entirely (WDFW 2019).

c. Is the site part of a migration route? If so, explain. [help]
No migration routes are known to be within the project area.

d. Proposed measures to preserve or enhance wildlife, if any: [help]
The proposed mitigation includes stream channel enhancements to Richards Creek to enhance aquatic and riparian habitat. Planting of native vegetation and the creation of natural stream channel characteristics will improve the chances of both fish and aviary species to frequent the project site.

e. List any invasive animal species known to be on or near the site. [help]
None are currently known to be located on or near the site.

6. Energy and Natural Resources [help]

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. [help]
No energy requirements are needed post construction of this project. The stormwater is gravity fed through the system.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. [help]
There are no proposed buildings or site features that may block solar radiation onto neighboring sites. Any impacts would be from heavy equipment which are not tall enough to impact a rooftop or pole mounted solar panel system.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: [help]
Limiting the idling on heavy equipment.

7. Environmental Health [help]

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. [help]
Due to the excavation activities adjacent to existing roads and businesses, contaminated soils may be encountered. Diesel

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fuels and hydraulic fluids would be the only potential hazardous waste prone to spills during construction.

1) Describe any known or possible contamination at the site from present or past uses. [help]
   There are 17 cleanup sites within a mile of the project area, all are at various levels from awaiting cleanup to No Further Action (NFA). The cleanup site located at the Formula One Fast Lube needs to addressed as it is where excavations associated with a lateral will occur and a NFA has not been cited for the area.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity. [help]
   There is 4 inch high pressure natural gas line owned by Puget Sound Energy that will need to be relocated due to this project along with a sanitary sewer that is a biological hazard.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project. [help]
   Diesel fuel and hydraulic fluid for heavy equipment may be stored onsite in approved locations.

4) Describe special emergency services that might be required. [help]
   No special emergency services will be required on-site for this project.

5) Proposed measures to reduce or control environmental health hazards, if any: [help]
   To avoid and minimize impacts, all stages of construction will employ the following best management practices (BMPs). Checking equipment for leaks and other problems that could result in the discharge of petroleum-based products or other material into critical areas.
   Taking corrective actions in the event of any discharge of oil, fuel, or chemicals into the water, including:
   In the event of a spill, beginning containment and cleanup efforts immediately and completing them expeditiously according to all local, state, and federal regulations, and ensuring they take precedence over ordinary work. Cleanup will include proper disposal of any spilled material and used cleanup material.
   Ascertaining the cause of the spill and taking appropriate action to prevent further incidents or environmental damage.
   Reporting spills to the Washington State Department of Ecology's (Ecology) Southwest Regional Spill Response

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Office at 360 407-6300.
Preventing the disposal or abandonment of excess or waste materials waterward of the OHWM or allowing these materials to enter waters of the state.
Disposing of waste materials in an appropriate landfill.
Keeping oil-absorbent materials present on site for use in the event of a spill or if any oil product is observed in critical areas.
Employment of erosion and sediment control measures including, but not limited to:
Using filter fabric, silt fence, plastic covering, sodding, sediment bags, mulching, and/or soil stabilization
Hand seeding, hydro-seeding, live staking
Employing inlet protection, sandbags, silt mat, straw bale barriers, vegetative buffers
Sweeping area roadways after construction

b. Noise [help]

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [help]
Traffic associated with Factoria Boulevard.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indi-cate what hours noise would come from the site. [help]
Heavy equipment noise associated with excavation and fill would occur on a short-term construction basis during daytime hours. Existing traffic noise occurs on a long-term basis.

3) Proposed measures to reduce or control noise impacts, if any: [help]
This project will follow guidelines set forth in Chapter 9.18 of the City of Bellevue City Code.

8. Land and Shoreline Use [help]

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [help]
Current land uses are commercial on adjacent properties. No impacts to the current uses and future uses won't be affected by this project as proposed.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [help]
No, there are no lands meeting this definition with the project area.

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1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how: [help]
No, there are no lands meeting this definition with the project area.

c. Describe any structures on the site. [help]
There are no structures within the project area.

d. Will any structures be demolished? If so, what? [help]
No structures will be demolished with this proposal.

e. What is the current zoning classification of the site? [help]
The project site is encompassed by commercially zoned properties and is adjacent to office zoned properties. (East and west of project area)

f. What is the current comprehensive plan designation of the site? [help]
Commercial Business.

g. If applicable, what is the current shoreline master program designation of the site? [help]
The project site is not located within a designated shoreline of the state.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [help]
Yes, Richards Creek is a designated F class stream under the City critical area ordinance.

Type F fish-bearing stream

i. Approximately how many people would reside or work in the completed project? [help]
None, there are no structures or commercial or residential associated with this project proposal.

j. Approximately how many people would the completed project displace? [help]
No people will be displaced from this project proposal.

k. Proposed measures to avoid or reduce displacement impacts, if any: [help]
No measures are proposed as there are no impacts associated with this project proposal.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [help]
Land uses are going to be staying the same between pre and post construction so existing and projected land uses and plans will be staying the same.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any: [help]

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There are no agricultural and forest lands of long-term commercial significance within or near the project area.

9. Housing [help]

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [help]
No housing units are included in this project proposal.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [help]
No units will be eliminated in this project proposal.

c. Proposed measures to reduce or control housing impacts, if any: [help]
No measures are needed as there are no impacts to housing in this project proposal.

10. Aesthetics [help]

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? [help]
The structures proposed in this project will all be below grade and not visible from surrounding road and commercial/residential areas.

b. What views in the immediate vicinity would be altered or obstructed? [help]
No views will be altered or obstructed by this project except from heavy equipment during construction.

c. Proposed measures to reduce or control aesthetic impacts, if any: [help]
No measures are proposed during construction. During the operation of the project, the mitigation proposed for riparian enhancements will create a greenspace in a largely developed section of Bellevue.

11. Light and Glare [help]

a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [help]
Minimal glare from construction vehicles during workday hours. At night, utility reroute work will have lights for construction, reflective safety cones and detour signs will create glare.

b. Could light or glare from the finished project be a safety hazard or interfere with views? [help]
No, there shouldn't be any safety hazards created from light or glare from this project. No permanent lighting is proposed.

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Existing building and street lights already present throughout the site. Any night work will have lights pointing away from the roadway.

c. What existing off-site sources of light or glare may affect your proposal? [help]
Parking lots neighboring the project have impacts from outdoor lighting and streetlights located on Factoria Boulevard.

d. Proposed measures to reduce or control light and glare impacts, if any: [help]
Aiming lights away from the roadway, shielding lights and limiting the use to when they are necessary.

12. Recreation [help]

a. What designated and informal recreational opportunities are in the immediate vicinity? [help]
None, but a mixed pedestrian and biking trail is located to the north of the project area.

b. Would the proposed project displace any existing recreational uses? If so, describe. [help]
None

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [help]
None are needed as there will be no impacts.

13. Historic and cultural preservation [help]

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe. [help]
No

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [help]
There is no material evidence on or within the direct vicinity of the project site. No professional studies have been done yet.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [help]
The site has been disturbed prior to the work detailed in this proposal and excavation limits are within prior excavations.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required. [help]

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No measures are currently proposed.

14. Transportation [help]

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [help]
Factoria Boulevard, SE 36th Street and SE 38th Street access the project site.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [help]
Yes, there is a bus stop within the project area that will be moved to the south during construction. The bus stop will be reestablished following construction.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [help]
None

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [help]
Existing sidewalks will be updated to be Americans With Disabilities Act compliance.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [help]
No.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [help]
No new thru lanes are proposed with this project so this data isn't necessary.
Proposal would not generate new, additional vehicular trips

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe. [help]
No interference to these products are expected with this proposal.

h. Proposed measures to reduce or control transportation impacts, if any: [help]
During construction, temporary traffic detours are needed to maintain traffic flow and business access. It is expected that the northbound lanes will be closed and the southbound lanes will be augmented to serve north-south traffic. Temporary driveway closures into Factoria Village will also occur, but two other driveways will continue to provice access.

15. Public Services [help]

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a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [help]
No.

b. Proposed measures to reduce or control direct impacts on public services, if any. [help]
There are no measures proposed as there are no impacts to these services.

16. Utilities [help]

a. Circle utilities currently available at the site: [help]
electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other
Yes, there are utilities located around the project area which includes electricity,natural gas, water, telephone and sanitary sewer. Some will need to be relocated and others will remain in place.

c. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. [help]
No new utility services are proposed or will be needed for the project.

C. Signature [help]

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Birol Shaha

Name of signee: *Birol Shaha*
Position and Agency/Organization: *Senior Engineer/Project Manager P.E. – City of Bellevue Utilities*
Date Submitted: *May 14, 2020*

PR 6/17/2020

CITY OF BELLEVUE

FACTORIA BLVD STORM CONVEYANCE IMPROVEMENTS PROJECT
C.I.P. XXX
BID #XXXXX

30% SUBMITTAL **FEBRUARY 2020**

MAYOR
JOHN CHELMINIAK

DEPUTY MAYOR
LYNNE ROBINSON

CITY MANAGER
BRAD MIYAKE

DIRECTOR OF UTILITIES
NAV OTAL

CITY COUNCIL
JOHN CHELMINIAK
LYNNE ROBINSON
CONRAD LEE
JARED NIEUWENHUIS
JENNIFER ROBERTSON
JOHN STOKES
JANICE ZAHN

SHEET INDEX

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* NOT INCLUDED IN 30% SUBMITTAL

SHEET INDEX

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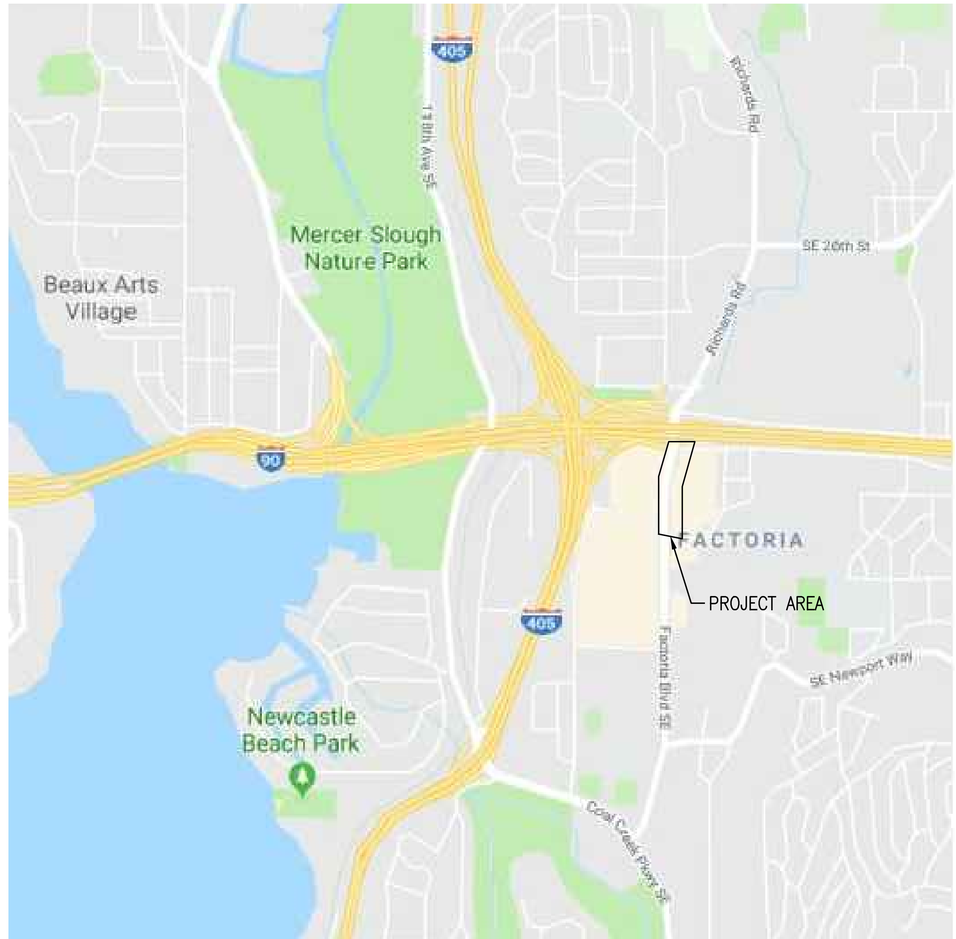

PLAN
LOCATION MAP
SCALE: NTS

CALL 72 HOURS BEFORE YOU DIG 1-800-424-5555

NO	DATE	BY	APPR	REVISIONS
1	03/03/20	JTE	JC	30% DESIGN – NOT FOR CONSTRUCTION

Louis Berger
520 Pike St, Ste 1005, Seattle, WA 98101 · 206.453.1043

30% SUBMITTAL

Approved By
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PROJECT MANAGER DATE

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DESIGNED BY	DATE
JAMES ELLIS	03/03/20
DRAWN BY	DATE
MIKE GISEBURT	03/03/20
CHECKED BY	DATE

City of Bellevue
UTILITIES

FACTORIA BOULEVARD STORM CONVEYANCE IMPROVEMENTS PROJECT
G1 COVER TITLE, LOCATION MAP, AND SHEET INDEX

SEC 27, T 25N, R 5E | SHT 1 OF 42

Ellis, James – 3/3/2020 2:41 PM – C:\Users\JEllis\Desktop\30% Submittal\G1 COVER TITLE LOCATION MAP AND SHEET INDEX.dwg

GENERAL NOTES

1. A PUBLIC INFORMATION SIGN LISTING 24–HOUR EMERGENCY PHONE NUMBERS FOR THE CITY AND THE CONTRACTOR WILL BE PROVIDED TO THE CONTRACTOR. THE CONTRACTOR MUST POST THE SIGN AT THE PROJECT SITE IN FULL VIEW OF THE PUBLIC, AND IT MUST REMAIN POSTED UNTIL THE FINAL SIGN–OFF BY THE ENGINEER.

2. ALL LOCATIONS OF EXISTING UTILITIES HAVE BEEN OBTAINED FROM AVAILABLE RECORDS AND SHOULD, THEREFORE, BE CONSIDERED ONLY APPROXIMATE AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS AND TO DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN. ALL WORK ASSOCIATED WITH ADJUSTING DESIGN TO AVOID UTILITIES AND TEMPORARY PROTECTION AND SUPPORT OF UTILITIES WITHIN EXCAVATION SHALL BE INCIDENTAL TO OTHER ITEMS.

3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL LAWS. ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND DETAILS OF THE CITY OF BELLEVUE AS AMENDED BY THE PROJECT SPECIAL PROVISIONS OR CONTRACT DRAWINGS. SPECIFICATIONS AND DETAILS SHALL BE THE CITY OF BELLEVUE SPECIFICATIONS AND DETAILS IN EFFECT ON THE DATE OF APPROVAL OF THESE CONSTRUCTION DRAWINGS.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UNDERGROUND UTILITIES. CALL UNDERGROUND UTILITY LOCATE SERVICE AT TELEPHONE NUMBER 1–800–424–5555 A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO ANY EXCAVATION.

6. OVERHEAD ELECTRICAL POWER, TELEPHONE, CABLE TV, AND OTHER OVERHEAD LINES MAY NOT BE SHOWN. DETERMINE THE EXTENT OF HAZARDS OR IMPACTS ON CONSTRUCTION ACTIVITIES CREATED BY OVERHEAD OR UNDERGROUND ELECTRICAL POWER, TELEPHONE, CABLE TV, AND OTHER LINES IN ALL AREAS, AND FOLLOW PROCEDURES DURING CONSTRUCTION AS REQUIRED BY LAW AND REGULATIONS. TAKE WHATEVER PRECAUTIONS AND REMEDIAL MEASURES THAT MAY BE REQUIRED TO PROTECT PERSONS AND PROPERTY AND TO AVOID DISRUPTION OF SERVICE.

7. MATERIALS REQUIRED FOR FILL, BACKFILL, AND OTHER WORK WILL BE SECURED BY THE CONTRACTOR FROM A SITE MEETING ALL OF THE REQUIREMENTS IN SHOWN ON THESE PLANS AND LOCAL, STATE, AND FEDERAL REGULATIONS REQUIRED FOR HEALTH, SAFETY, AND THE PUBLIC WELFARE.

8. THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER THAT SHOWS HOW THE WORK SHALL BE ACCOMPLISHED WHILE MAINTAINING TRAFFIC AND PEDESTRIAN ACCESS PER PROJECT REQUIREMENTS AT ALL TIMES.

9. FLAGGERS, UNIFORMED OFFICERS, AND/OR TEMPORARY PORTABLE SIGNALIZED TRAFFIC LIGHTS SHALL BE USED TO CONTROL TRAFFIC THROUGH THE PROJECT SITE.

10. ANY WORK WITHIN THE RIGHT–OF–WAY THAT INVOLVES CROSSING STREETS OR IMPEDING THE FLOW OF TRAFFIC WILL REQUIRE 48 HOURS ADVANCE NOTIFICATION, EXCEPT IN THE EVENT OF AN EMERGENCY, TO ALL OF THE FOLLOWING:

FIRE DEPARTMENT:	425–452–6892
POLICE DEPARTMENT:	425–452–6917
DEVELOPMENT SERVICES, GENERAL:	425–452–6800
DEVELOPMENT SERVICES, CLEARING AND GRADING:	425–452–2019
KING COUNTY METRO (24–HR):	206–684–1705 OR 206–296–8100
BELLEVUE SCHOOL DISTRICT:	425–456–4000

LEGEND

SYMBOL EXISTING	DESCRIPTION
	QUARTER CORNER
312604900	TAX LOT / PARCEL NUMBER
	WHEEL CHAIR RAMP
	SIGN
	POLE
	TRAFFIC SIGNAL CABINET
	STREET LIGHT W/ ARM
	POST OR BOLLARD
	DECIDUOUS TREE
	CONIFEROUS TREE
W	WATER MANHOLE
WV	WATER VALVE
WM	WATER METER
	FIRE HYDRANT
S	SEWER MANHOLE
D	STORM DRAIN MANHOLE
D	STORM DRAIN VAULT
	STORM CATCH BASIN
	STORM CULVERT
E	ELECTRIC MANHOLE
E	ELECTRIC VAULT
T	TELEPHONE MANHOLE
TR	TELEPHONE RISER
GV	GAS VALVE

	CONSTRUCTION/CLEARING LIMITS
	GRADING LIMITS
	ROAD CENTERLINE
	STREAM FLOW LINE
	ORDINARY HIGH WATER MARK
	WETLAND BOUNDARY
	EDGE OF GRAVEL OR DIRT
	TRAFFIC STRIPING
	ROCKERY
x x x	FENCE LINE (TYPE AS NOTED)
	TREE/VEGETATION LINE
	EASEMENT LINE
	PROPERTY LINE
	QUARTER SECTION LINE
	EXISTING RIGHT–OF–WAY LINE
S	SANITARY SEWER
G	NATURAL OR PETROLEUM GAS
P	UNDERGROUND POWER
D	STORM DRAIN
T	UNDER GROUND TELEPHONE
W	DOMESTIC WATER
	WATTLE
	GEOTEXTILE (SECTION)
	TEMPORARY DIVERSION PIPE

ABBREVIATIONS

ø	DIAMETER	CSWPPP	CONTAMINATED STORMWATER POLLUTION PREVENTION PLAN	LF	LINEAR FOOT/FEET	S	SOUTH, SLOPE
AB	ANCHOR BOLT			MAX	MAXIMUM	SD	STORM DRAIN
AC	ACRE(S), ASBESTOS CONCRETE	CTR	CENTER	MH	MANHOLE	SE	SOUTHEAST
ACP	ASBESTOS CONCRETE PIPE	CY	CUBIC YARD(S)	MID	MIDPOINT, MIDDLE	SF	SQUARE FOOT/FEET
APPROX	APPROXIMATE	DECID	DECIDUOUS	MIN	MINIMUM	SHT	SHEET
AVE	AVENUE	DI	DUCTILE IRON	MISC	MISCELLANEOUS	SP	SPACING
AVG	AVERAGE	DIA, DIAM	DIAMETER	MON	MONUMENT	SPEC	SPECIFICATION
ASPH	ASPHALT	DIM	DIMENSION	N	NORTH, NORTHING	SS	SANITARY SEWER
BMP	BEST MANAGEMENT PRACTICE	DVD	DIGITAL VIDEO DISC	NAD	NORTH AMERICAN DATUM	SSMH	SANITARY SEWER MANHOLE
BOT	BOTTOM	DW	DRIVEWAY	NAVD	NORTH AMERICAN VERTICAL DATUM	SST	STAINLESS STEEL
CB	CATCH BASIN	DWG	DRAWING	NE	NORTHEAST	ST	STREET
CC	CENTER TO CENTER	E	EAST, EASTING	NO	NUMBER	STD	STANDARD
CCA	CHROMATED COPPER ARSENATE	EC	EROSION CONTROL	NTS	NOT TO SCALE	STA	STATION
CESCL	CONTRACTOR EROSION SEDIMENT CONTROL LEAD	EFP	EQUIVALENT FLUID PRESSURE	NW	NORTHWEST	STW	STEEL WELD PIPE
		EL, ELEV	ELEVATION	OC	ON CENTER	SW	SOUTHWEST
CFS	CUBIC FEET PER SECOND	EMB	EMBEDMENT	OD	OUTSIDE DIAMETER	T	TELECOMMUNICATIONS
CG	CURB AND GUTTER	EOP	EDGE OF PAVEMENT	OH	OVERHEAD POWER LINE	TBD	TO BE DETERMINED
CH, CHAN	CHANNEL	EX, EXIST	EXISTING	OHW	ORDINARY HIGH WATER	TEMP	TEMPORARY
CLF	CHAIN LINK FENCE	FT	FOOT, FEET	OHWM	ORDINARY HIGH WATER MARK	TESC	TEMPORARY EROSION AND SEDIMENT CONTROL
CLR	CLEAR, CLEARANCE	G	GAS	P	POWER		
℄	CENTERLINE	GERM	GERMINATION	PCCP	PORTLAND CEMENT CONCRETE PAVEMENT	TYP	TYPICAL
CMP	CORRUGATED METAL PIPE	GPS	GLOBAL POSITIONING SYSTEM			V, VERT	VERTICAL
COB	CITY OF BELLEVUE	GV	GAS VALVE	PCF	POUNDS PER CUBIC FOOT	VEG	VEGETATION
CONC	CONCRETE	GAL	GALLON(S)	PG	PEA GRAVEL	W	WEST, WATER, WIDE/WIDTH
CSBC	CRUSHED SURFACING BASE COURSE	H	HIGH	PSF	POUNDS PER SQUARE FOOT	W/	WITH
CSTC	CRUSHED SURFACING TOP COURSE	HMA	HOT MIX ASPHALT	PL	PLACE, PLATE	WAC	WASHINGTON ADMINISTRATIVE CODE
CSW	CONCRETE SIDEWALK	HORIZ	HORIZONTAL	PROP	PROPOSED	WM	WATER METER, WILLIAMETTE MERIDIAN
		ID	INNER DIAMETER	PP	POWER POLE	WSDOT	WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
		IE	INVERT ELEVATION	PVC	POLYVINYL CHLORIDE		
		IPS	IRON PIPE SIZE	R	RADIUS	WSEL	WATER SURFACE ELEVATION
		L	LENGTH	RD	ROAD	WV	WATER VALVE
		LB	POUND	RMJ	RESTRAINED MECHANICAL JOINT	YR	YEAR
				ROW	RIGHT OF WAY		

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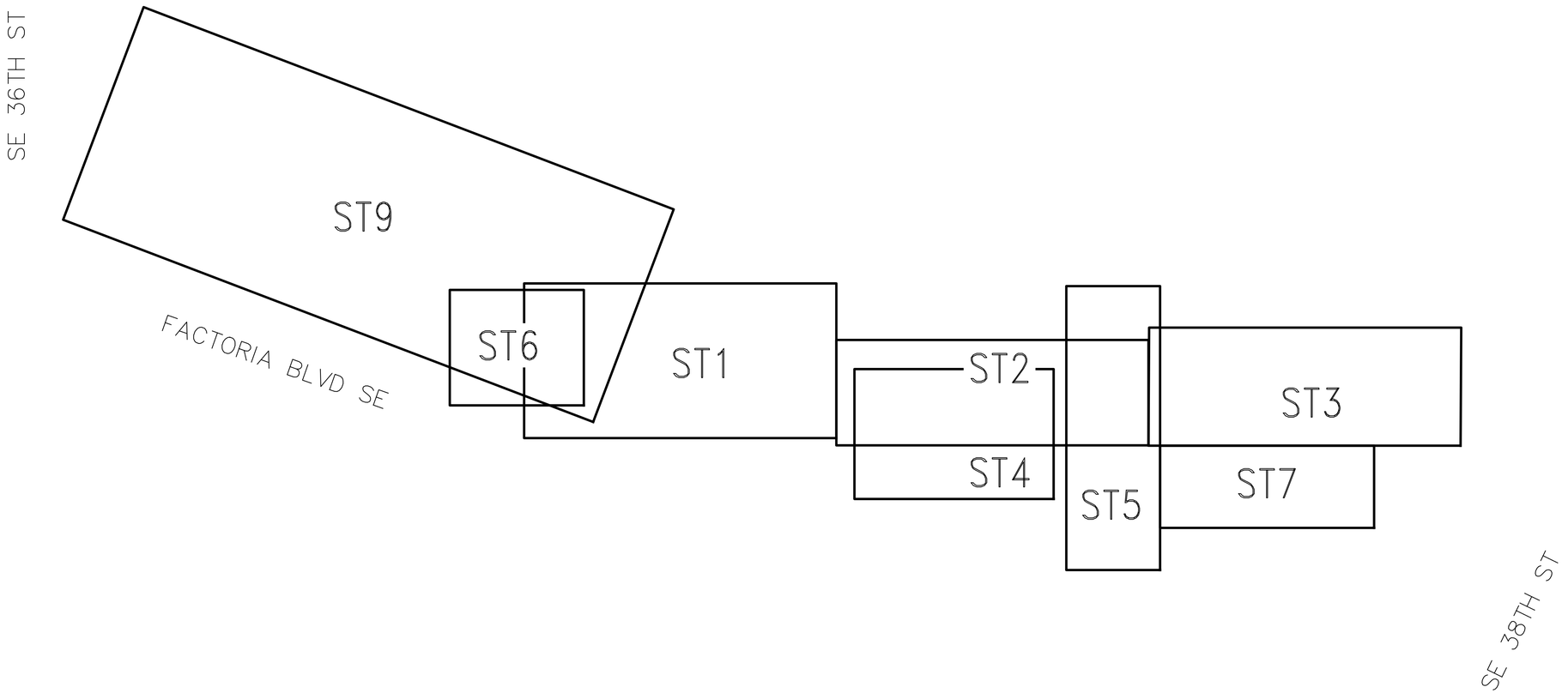
FACTORIA BOULEVARD STORM CONVEYANCE IMPROVEMENTS PROJECT
G2 LEGEND, NOTES, AND ABBREVIATIONS

SEC 27, T 25N, R 5E | SHT 2 OF 42

Ellis, James – 3/3/2020 2:42 PM – C:\Users\JEllis\Desktop\30% Submittal\2 G2 LEGEND, NOTES, AND ABBREVIATIONS.dwg



PLAN
KEY MAP
SCALE: 1"=50'

SURVEY NOTES

1. COORDINATES PROVIDED BY CITY OF BELLEVUE FOR HORIZONTAL CONTROL POINTS 1421 AND 2745:

   1421 – N=214222.993 E=1310785.620
   2745 – N=213902.295 E=1310687.399

   ADDITIONAL CONTROL POINTS ESTABLISHED BY CLOSED TRAVERSE. ELEVATIONS ESTABLISHED BY CLOSED LEVEL LOOP.

2. THE UTILITIES SHOWN HEREON ARE BASED ON OBSERVATION OF SURFACE FEATURES, RECORD UTILITY MAPS AND BY PAINT MARKS SET BY A UTILITY LOCATING COMPANY. FIELD LOCATIONS MUST BE VERIFIED PRIOR TO ANY CONSTRUCTION.

3. FIELD SURVEY WAS PERFORMED APRIL 26–MAY 5, 2016. FIELD BOOK 823F, PAGES 38–53 BY REID MIDDLETON, WITH SUPPLEMENTAL SURVEY BY PARAMETRIX IN OCTOBER, 2019.

DATUMS:

HORIZONTAL DATUM: NAD 83/11 WA NORTH

VERTICAL DATUM: NAVD 88

PROJECT BENCHMARK: COB BENCHMARK NO. 693
ELEVATION = 92.502

1"=50' 50 25 0 50 100
Scale Feet

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BEFORE YOU DIG
1-800-424-5555

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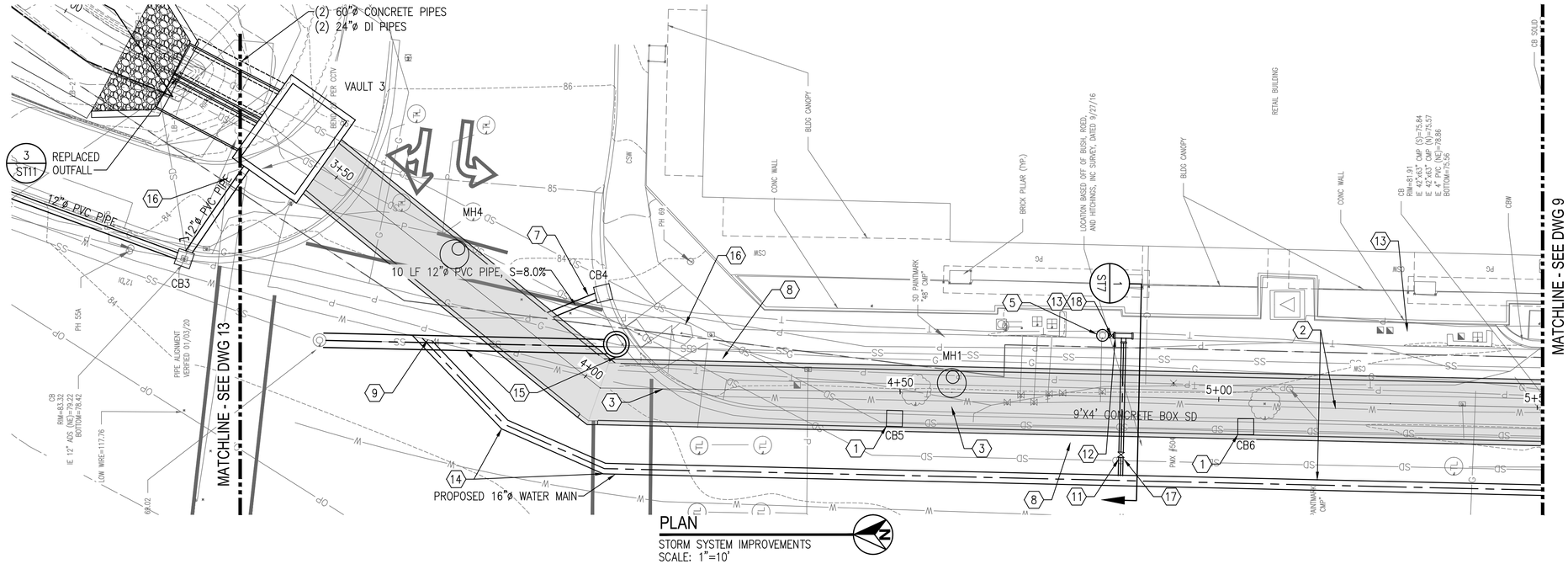
City of Bellevue
UTILITIES

FACTORIA BOULEVARD STORM
CONVEYANCE IMPROVEMENTS PROJECT
G3 KEY MAP

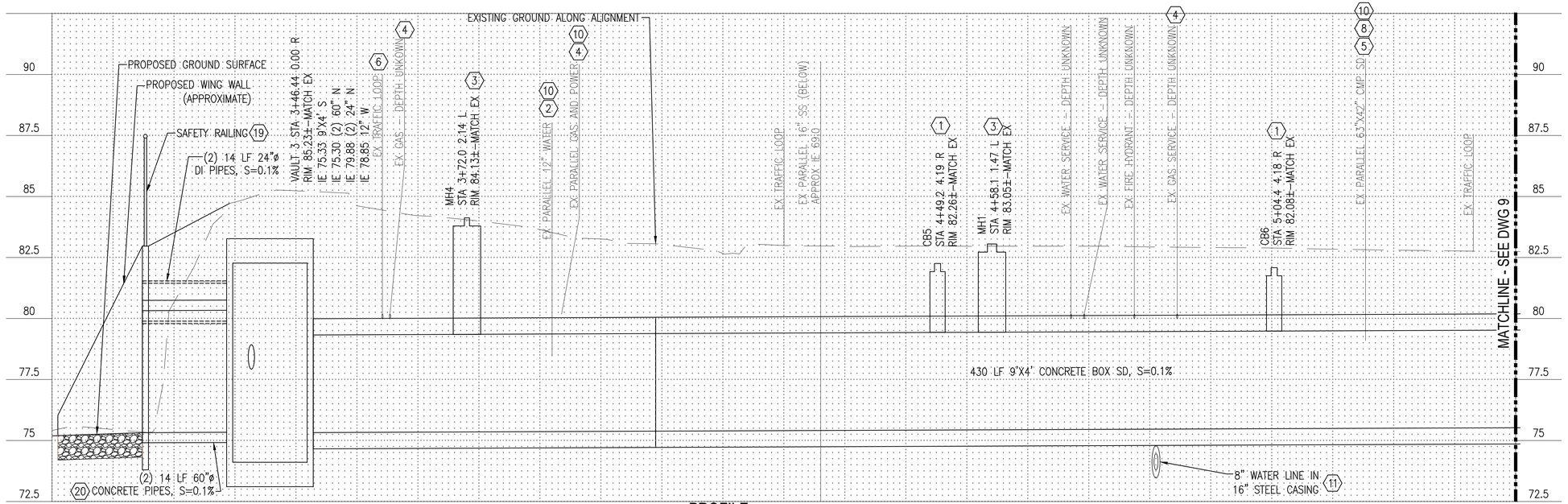
SEC 27, T 25N, R 5E | SHT 3 OF 42

Ellis, James – 3/3/2020 2:42 PM – C:\Users\JEllis\Desktop\30% Submittal\3 G3 KEY MAP – Key map.dwg



PLAN

STORM SYSTEM IMPROVEMENTS
SCALE: 1"=10'



PROFILE

STA 3+06.8 TO 5+45.8
HORIZ SCALE: 1"=10'
VERT SCALE: 1"=2.5'

GENERAL NOTES

1. SEE GENERAL STORMWATER NOTES ON DWG G2.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND POTHOLING ALL UTILITIES NOT PREVIOUSLY POTHOLED WITHIN EXCAVATION LIMITS, WHICH SHALL BE INCIDENTAL TO PIPE BID ITEMS. WHERE ADDITIONAL SITE SPECIFIC POTHOLING IS REQUIRED BY THE PLANS OR REQUESTED BY ENGINEER, IT SHALL BE PAID FOR BY "SITE SPECIFIC POTHOLING".
3. SEE DWG ST8 FOR UTILITY POTHOLE DATA.
4. SEE DWG ST8 FOR STORM STRUCTURE DATA.
5. STATION/OFFSET LOCATION CALLOUTS AND RIM ELEVATIONS PROVIDED ARE AT THE CENTER OF THE DRAINAGE STRUCTURE UNLESS OTHERWISE NOTED.
6. LIMIT DISTURBANCE TO ONLY THOSE AREAS NECESSARY FOR CONSTRUCTING THE PROPOSED IMPROVEMENTS.
7. EXISTING TELECOMM AND CABLE LINES (FIBER OPTIC, COPPER, AND CONDUIT) NOT SHOWN IN PROFILES. TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTES

1. INSTALL COMBINATION INLET AND CONNECT TO BOX CULVERT PER DETAIL 1 ON DWG ST11.
2. REMOVE EXISTING 12" WATER MAIN. REPLACE WITH 16" DI WATER MAIN AS SHOWN ON PLAN.
3. INSTALL 48" ACCESS MANHOLE ON BOX CULVERT PER DETAIL 2 ON DWG ST11.
4. EXISTING GAS AND POWER LINES TO BE RELOCATED BY OTHERS.
5. REPLACE FIRE HYDRANT ASSEMBLY PER COB STD DTL W–13.
6. CONTRACTOR TO RESTORE TRAFFIC LOOP IN KIND.
7. CONNECT 12" SD TO BOX SD.
8. REMOVE AND DISPOSE OF EXISTING STORM PIPE.
9. CUT EXISTING WATER MAIN AND REMOVE PIPE TO SOUTH. CONNECT TO NEW 16" WATER MAIN WITH 45° ELBOW AND 16"X12" REDUCER.
10. PARALLEL UTILITY NOT SHOWN ON PROFILE FOR CLARITY.
11. NEW CASED 8" DIAMETER WATER UNDER NEW STORM BOX. SEE DWG ST7.
12. 8"X6"X6" TEE FOR NEW HYDRANT LINE, PLUGGED TO SOUTH.
13. 6" SERVICE LINE FOR FIRE HYDRANT.
14. 16" 22.5° ELBOW.
15. NEW TEMPORARY SSMH AND CASED 16" DIAMETER SEWER.
16. REMOVE AND REPLACE TRAFFIC SIGNAL.
17. 8" GATE VALVE.
18. 6" GATE VALVE.
19. INSTALL METAL SAFETY RAILING PER COB STD DTL RS–110–1.
20. INSTALL (2) 60" TIDFLEX VALVES, CHECKMATE VALVES, OR EQUIVALENT IN 60" PIPES FOR FISH EXCLUSION.

1"=10' Scale: 10 5 0 10 20 Feet

1"=2.5' Scale: 2.5 1.25 0 2.5 5 Feet

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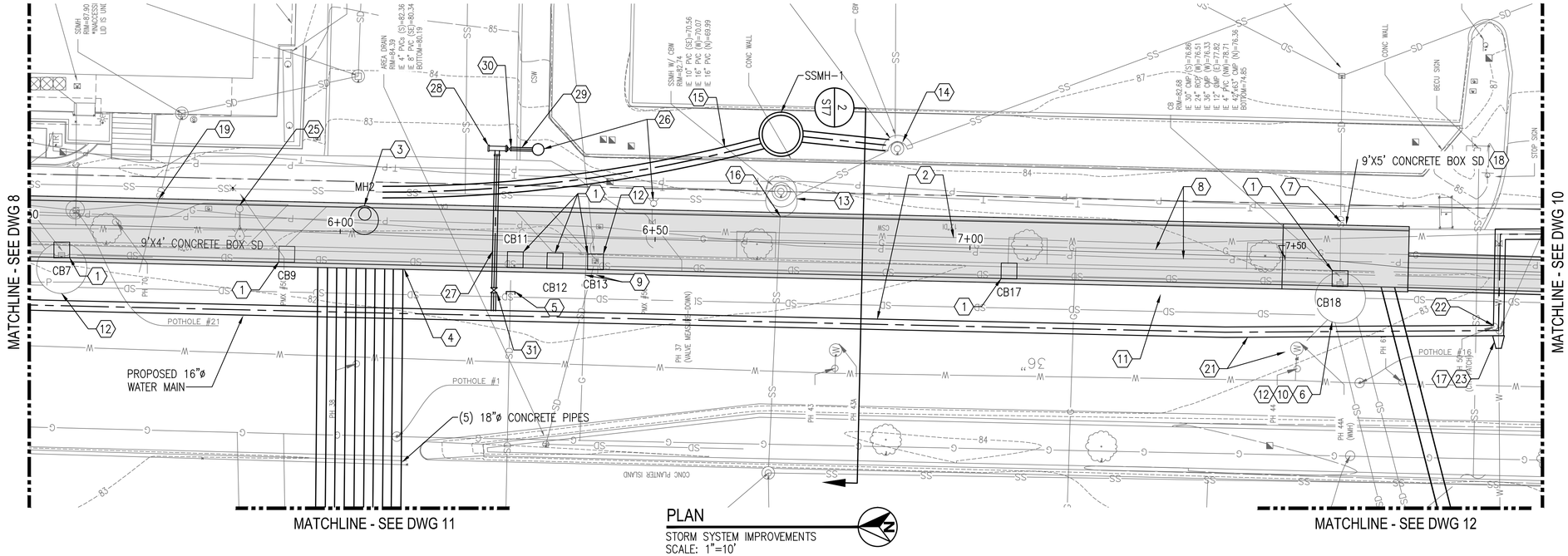
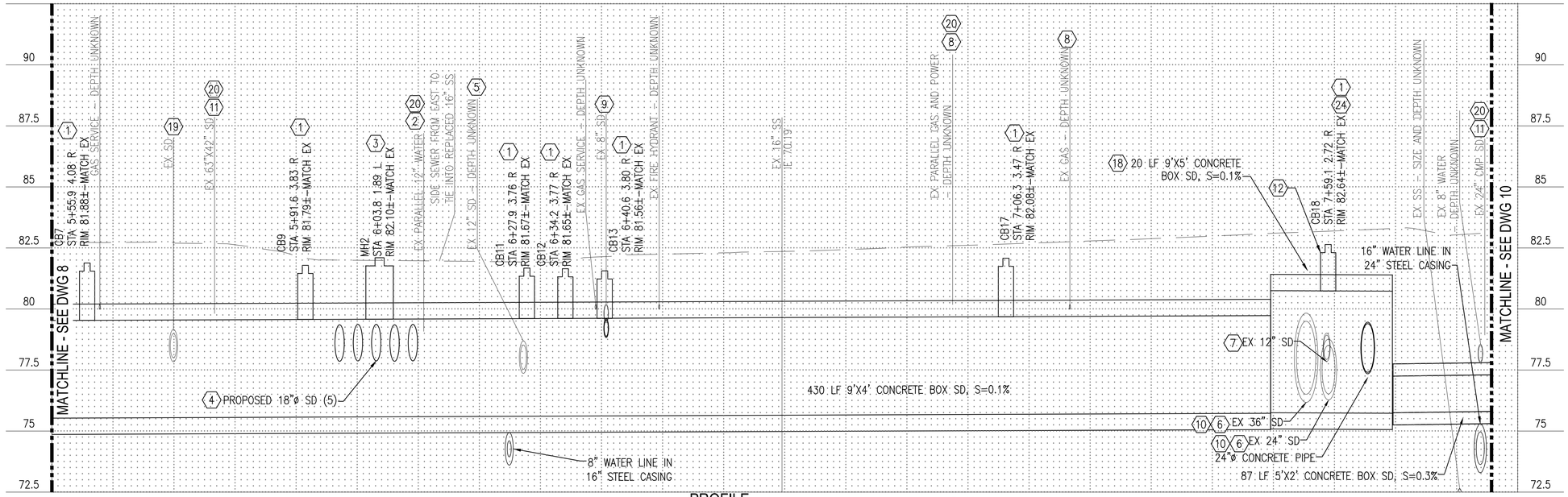
FACTORIA BOULEVARD STORM CONVEYANCE IMPROVEMENTS PROJECT
ST1 STORMWATER TRUNK PLAN AND PROFILE, SHEET 1 OF 3

SEC 27, T 25N, R 5E | SHT 8 OF 42



PLAN

STORM SYSTEM IMPROVEMENTS
SCALE: 1"=10'



PROFILE

STA 5+45.8 TO 7+86.9
HORIZ SCALE: 1"=10'
VERT SCALE: 1"=2.5'

1"=10' Scale: 10 5 0 10 20 Feet
1"=2.5' Scale: 2.5 1.25 0 2.5 5 Feet

GENERAL NOTES

1. SEE GENERAL STORMWATER NOTES ON DWG G2.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND POTHOLING ALL UTILITIES NOT PREVIOUSLY POTHOLED WITHIN EXCAVATION LIMITS, WHICH SHALL BE INCIDENTAL TO PIPE BID ITEMS. WHERE ADDITIONAL SITE SPECIFIC POTHOLING IS REQUIRED BY THE PLANS OR REQUESTED BY ENGINEER, IT SHALL BE PAID FOR BY "SITE SPECIFIC POTHOLING".
3. SEE DWG ST8 FOR UTILITY POTHOLE DATA.
4. SEE DWG ST8 FOR STORM STRUCTURE DATA.
5. STATION/OFFSET LOCATION CALLOUTS AND RIM ELEVATIONS PROVIDED ARE AT THE CENTER OF THE DRAINAGE STRUCTURE UNLESS OTHERWISE NOTED.
6. LIMIT DISTURBANCE TO ONLY THOSE AREAS NECESSARY FOR CONSTRUCTING THE PROPOSED IMPROVEMENTS.
7. EXISTING TELECOMM AND CABLE LINES (FIBER OPTIC, COPPER, AND CONDUIT) NOT SHOWN IN PROFILES. TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTES

1. INSTALL COMBINATION INLET AND CONNECT TO BOX SD PER DETAIL 1 ON DWG ST11.
2. REMOVE EXISTING 12" WATER MAIN. REPLACE WITH 16" DI WATER MAIN AS SHOWN ON PLAN.
3. INSTALL 48" ACCESS MANHOLE ON BOX SD PER DETAIL 2 ON DWG ST11.
4. CONNECT (5) NEW 18" SD TO NEW BOX SD.
5. FILL EXISTING SD WITH CDF AND ABANDON.
6. EXTEND EXISTING 24" AND 36" SD TO CONNECT TO NEW BOX SD.
7. CONNECT EXISTING 12" SD TO NEW BOX SD.
8. EXISTING GAS AND POWER TO BE RELOCATED BY OTHERS.
9. TRIM AS NEEDED AND CONNECT EXISTING STORM DRAIN TO NEW BOX SD. CONTRACTOR TO CONFIRM ELEVATION PRIOR TO CONSTRUCTION AND ADJUST IF NECESSARY.
10. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING SD PIPES PRIOR TO CONSTRUCTING STORM IMPROVEMENTS.
11. REMOVE AND DISPOSE OF EXISTING STORM PIPE.
12. REMOVE AND DISPOSE OF EXISTING STORM STRUCTURE.
13. REMOVE EXISTING SSMH. FILL SS TO SE AND N WITH CDF AND ABANDON IN PLACE.
14. CONNECT NEW SS MAIN TO EXISTING MANHOLE. PLUG AND ABANDON SS TO NW.
15. LAY NEW 16" SS WITH MAXIMUM 5% DEFLECTION TO TRANSITION TO EXISTING ALIGNMENT.
16. EXTEND EXISTING 16" SS AND CONNECT TO NEW SSMH.
17. CUT EXISTING WATER MAIN AND REMOVE PIPE TO EAST. CONNECT TO NEW 16" WATER MAIN WITH 16"X8" REDUCER.
18. INSTALL APPROXIMATELY 20 LF SECTION OF 9'X5' CONCRETE BOX SD TO ALLOW CLEARANCE FOR EXISTING STORM DRAIN CONNECTIONS.
19. TRIM AS NEEDED AND CONNECT EXISTING STORM DRAIN TO NEW BOX SD. SIZE AND DEPTH UNKNOWN, CONTRACTOR TO CONFIRM.
20. PARALLEL UTILITY NOT SHOWN ON PROFILE FOR CLARITY.
21. HORIZONTAL ALIGNMENT PENDING INFORMATION ON SPU ACCESS/BLOW-OFF STRUCTURE.
22. 16"X16"X16" TEE.
23. 16"X8" REDUCER.
24. EXTEND AND CONNECT EXISTING DRAIN LINE FROM SPU MANHOLE. CONTRACTOR TO CONFIRM SIZE AND DEPTH.
25. REMOVE AND REPLACE STREET LIGHT.
26. REPLACE FIRE HYDRANT ASSEMBLY PER COB STD DTL W-13.
27. NEW CASED 8" DIAMETER WATER UNDER NEW STORM BOX.
28. 8"X6"X6" TEE FOR NEW HYDRANT LINE, PLUGGED TO NORTH.
29. 6" SERVICE LINE FOR FIRE HYDRANT.
30. 6" GATE VALVE.
31. 8" GATE VALVE.

CALL 72 HOURS BEFORE YOU DIG 1-800-424-5555

NO	DATE	BY	APPR	REVISIONS
1	03/03/20	JTE	JC	30% DESIGN - NOT FOR CONSTRUCTION

Louis Berger
520 Pike St, Ste 1005, Seattle, WA 98101 · 206.453.1043

30% SUBMITTAL

Approved By

DESIGN MANAGER DATE

PROJECT MANAGER DATE

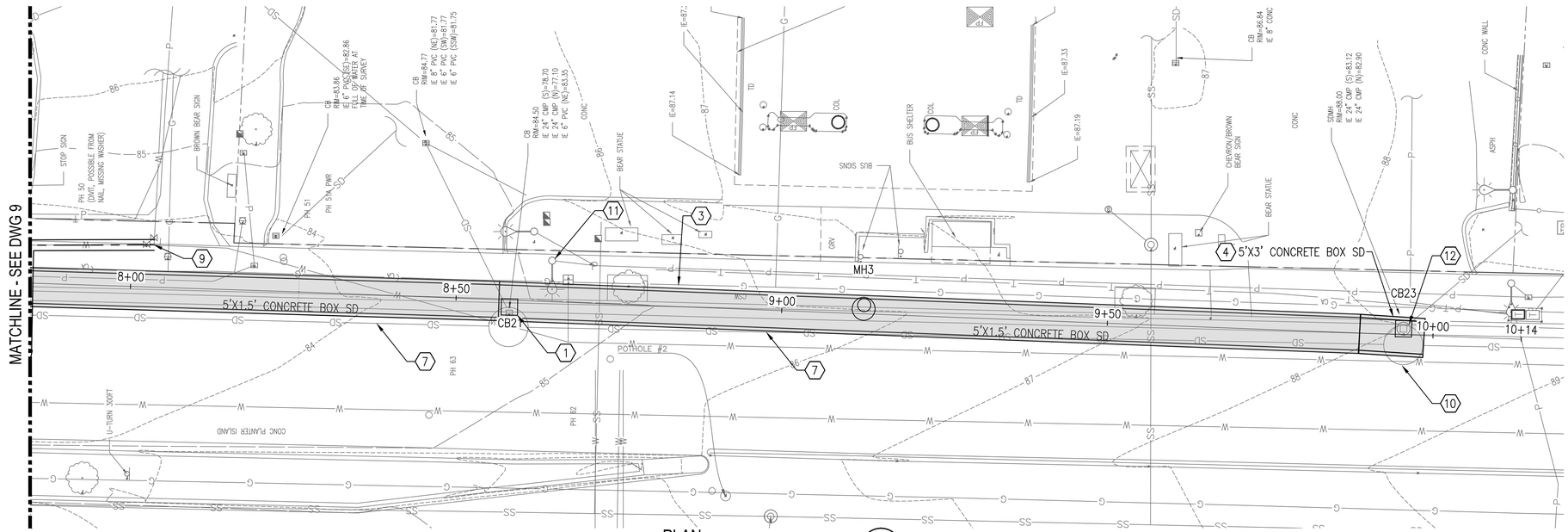
JAY CAMMERMEYER	03/03/20
DESIGNED BY	DATE
JAMES ELLIS	03/03/20
DRAWN BY	DATE
MIKE GISEBURT	03/03/20
CHECKED BY	DATE

City of Bellevue
UTILITIES

FACTORIA BOULEVARD STORM CONVEYANCE IMPROVEMENTS PROJECT
ST2 STORMWATER TRUNK PLAN AND PROFILE, SHEET 2 OF 3

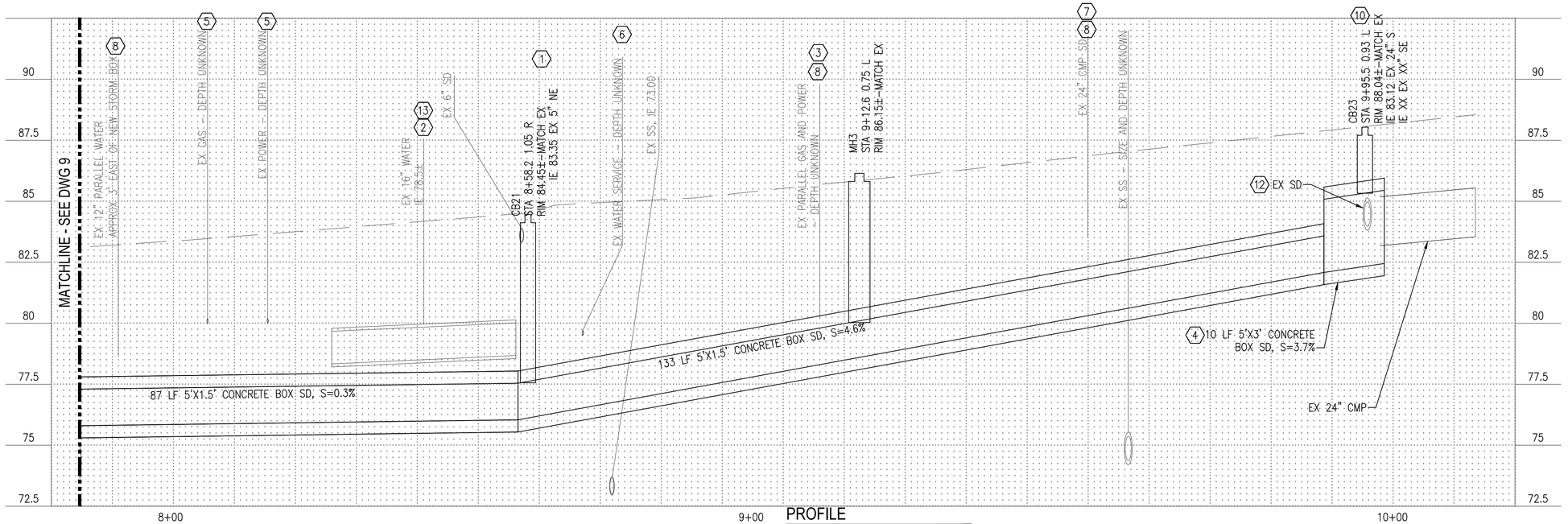
SEC 27, T 25N, R 5E | SHT 9 OF 42

Ellis, James - 3/3/2020 2:43 PM - C:\Users\JEllis\Desktop\30% Submittal\9 ST2 STORMWATER TRUNK PLAN AND PROFILE 2 OF 3.dwg



PLAN

STORM SYSTEM IMPROVEMENTS
SCALE: 1"=10'



PROFILE

STA 7+86.9 TO 10+26.9
HORIZ SCALE: 1"=10'
VERT SCALE: 1"=2.5'

GENERAL NOTES

1. SEE GENERAL STORMWATER NOTES ON DWG G2.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND POTHOLING ALL UTILITIES NOT PREVIOUSLY POTHOLED WITHIN EXCAVATION LIMITS, WHICH SHALL BE INCIDENTAL TO PIPE BID ITEMS. WHERE ADDITIONAL SITE SPECIFIC POTHOLING IS REQUIRED BY THE PLANS OR REQUESTED BY ENGINEER, IT SHALL BE PAID FOR BY "SITE SPECIFIC POTHOLING".
3. SEE DWG ST8 FOR UTILITY POTHOLE DATA.
4. SEE DWG ST8 FOR STORM STRUCTURE DATA.
5. STATION/OFFSET LOCATION CALLOUTS AND RIM ELEVATIONS PROVIDED ARE AT THE CENTER OF THE DRAINAGE STRUCTURE UNLESS OTHERWISE NOTED.
6. LIMIT DISTURBANCE TO ONLY THOSE AREAS NECESSARY FOR CONSTRUCTING THE PROPOSED IMPROVEMENTS.
7. EXISTING TELECOMM AND CABLE LINES (FIBER OPTIC, COPPER, AND CONDUIT) NOT SHOWN IN PROFILES. TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTES

1. REMOVE EXISTING CB AND INSTALL COMBINATION INLET AND CONNECT TO BOX SD PER DETAIL 1 ON DWG ST11. CONNECT EXISTING 6" SD TO NE.
2. PROTECT AND PROVIDE TEMPORARY SUPPORT DURING CONSTRUCTION.
3. EXISTING GAS AND POWER TO BE RELOCATED.
4. INSTALL APPROXIMATELY 10 LF SECTION OF 5'X3' CONCRETE BOX SD TO ALLOW CLEARANCE FOR EXISTING STORM DRAIN CONNECTIONS.
5. EXISTING UTILITY TO BE RELOCATED BY OTHERS.
6. RELOCATE EXISTING WATER SERVICE ABOVE BOX SD.
7. REMOVE AND DISPOSE OF EXISTING STORM PIPE.
8. PARALLEL UTILITY NOT SHOWN ON PROFILE FOR CLARITY.
9. CONNECT NEW WATER AT EXISTING TEE.
10. REMOVE AND DISPOSE OF EXISTING STORM STRUCTURE.
11. PROTECT EXISTING STREET LIGHT.
12. CONTRACTOR TO POTHOLE EXISTING SD AND CONNECT TO NEW BOX SD.
13. INSTALL ETHAFOAM PAD BETWEEN WATER AND STORM.

1"=10' Scale: 10 5 0 10 20 Feet

1"=2.5' Scale: 2.5 1.25 0 2.5 5 Feet

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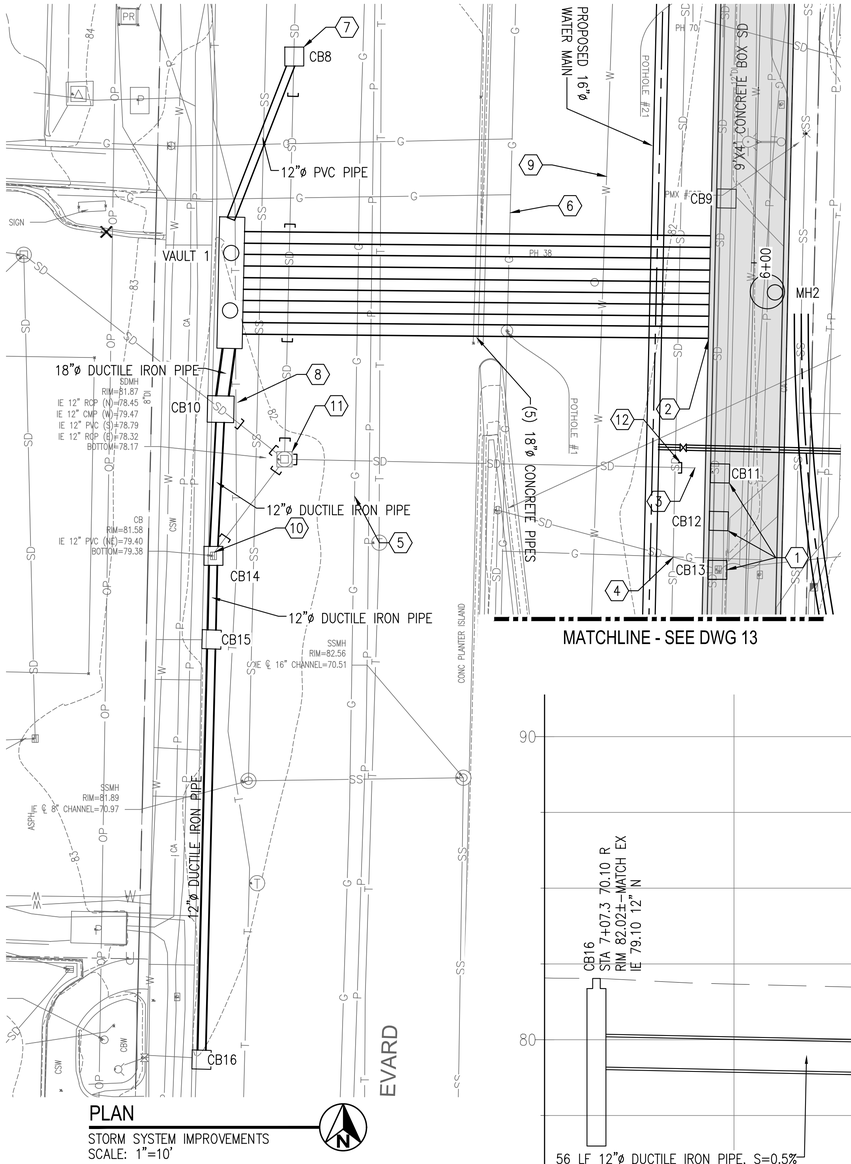
City of Bellevue
UTILITIES

FACTORIA BOULEVARD STORM CONVEYANCE IMPROVEMENTS PROJECT
ST3 STORMWATER TRUNK PLAN AND PROFILE, SHEET 3 OF 3

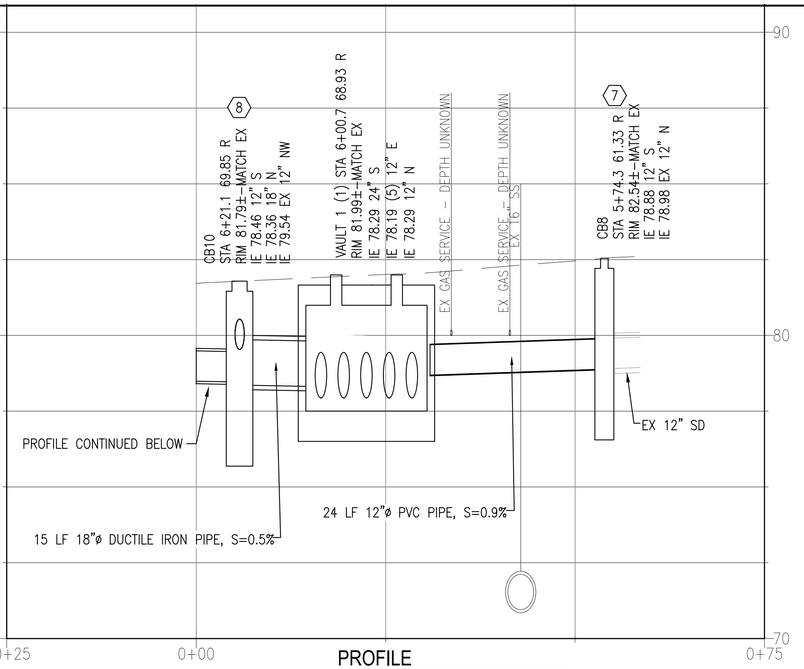
SEC 27, T 25N, R 5E | SHT 10 OF 42

Ellis, James – 3/3/2020 2:43 PM – C:\Users\JEllis\Desktop\30% Submittal\10 ST3 STORMWATER TRUNK PLAN AND PROFILE 3 OF 3.dwg



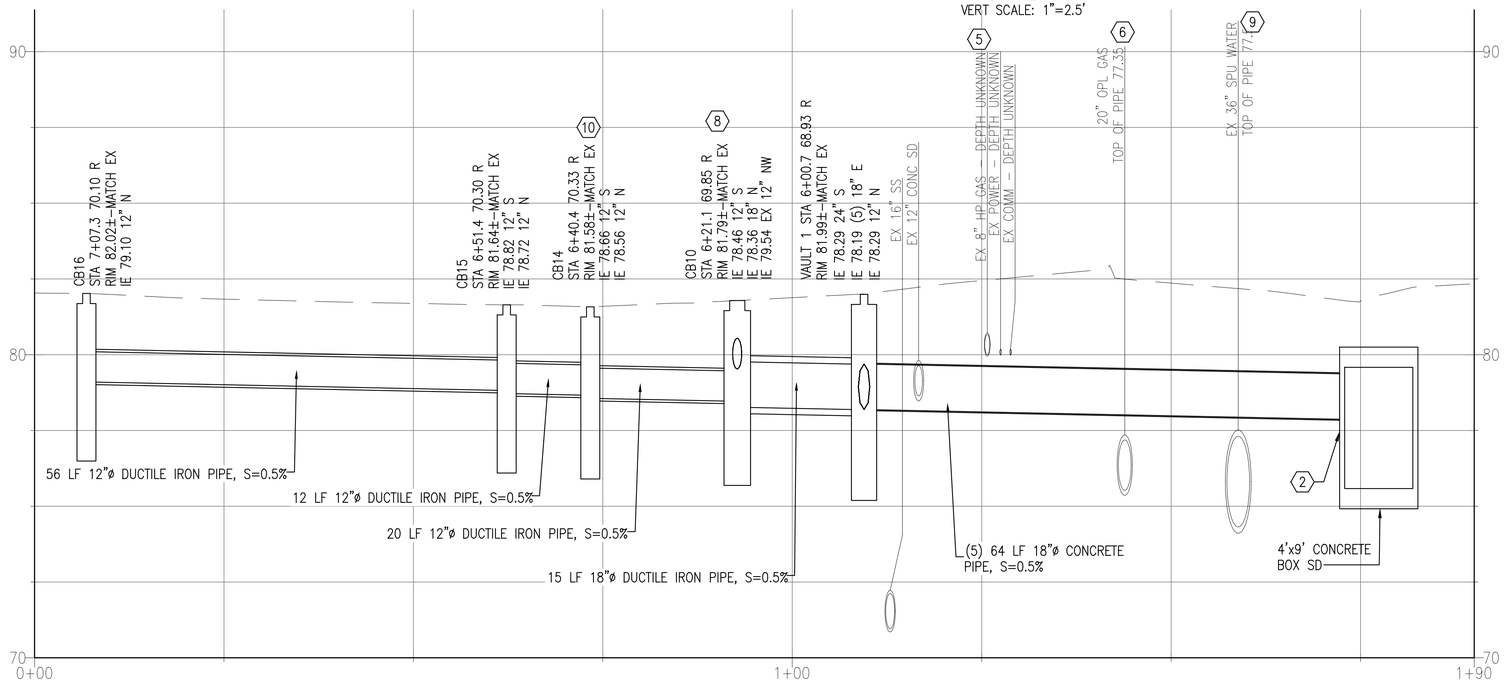
PLAN

STORM SYSTEM IMPROVEMENTS
SCALE: 1"=10'



PROFILE

LATERAL 1 – APPROX STA 6+00
HORIZ SCALE: 1"=10'
VERT SCALE: 1"=2.5'



PROFILE

LATERAL 1 – APPROX STA 6+00
HORIZ SCALE: 1"=10'
VERT SCALE: 1"=2.5'

GENERAL NOTES

1. SEE GENERAL STORMWATER NOTES ON DWG G2.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND POTHOLING ALL UTILITIES NOT PREVIOUSLY POTHOLED WITHIN EXCAVATION LIMITS, WHICH SHALL BE INCIDENTAL TO PIPE BID ITEMS. WHERE ADDITIONAL SITE SPECIFIC POTHOLING IS REQUIRED BY THE PLANS OR REQUESTED BY ENGINEER, IT SHALL BE PAID FOR BY "SITE SPECIFIC POTHOLING".
3. SEE DWG ST8 FOR UTILITY POTHOLE DATA.
4. SEE DWG ST8 FOR STORM STRUCTURE DATA.
5. STATION/OFFSET LOCATION CALLOUTS AND RIM ELEVATIONS PROVIDED ARE AT THE CENTER OF THE DRAINAGE STRUCTURE UNLESS OTHERWISE NOTED.
6. LIMIT DISTURBANCE TO ONLY THOSE AREAS NECESSARY FOR CONSTRUCTING THE PROPOSED IMPROVEMENTS.
7. ALL STRUCTURE STATION AND OFFSET CALLOUTS ARE RELATIVE TO THE MAIN TRUNK ALIGNMENT.
7. EXISTING TELECOMM AND CABLE LINES (FIBER OPTIC, COPPER, AND CONDUIT) NOT SHOWN IN PROFILES. TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTES

1. INSTALL COMBINATION INLET AND CONNECT TO BOX CULVERT PER DETAIL 1 ON DWG ST11.
2. CONNECT (5) NEW 18" SD PIPES TO BOX CULVERT.
3. EXISTING 12" SD TO REMAIN. CORE DRILL AND EXTEND TO CONNECT TO NEW BOX CULVERT. CONTRACTOR TO CONFIRM ELEVATION PRIOR TO CONSTRUCTION.
4. CORE DRILL AND EXTEND TO CONNECT TO NEW BOX CULVERT. CONTRACTOR TO CONFIRM ELEVATION PRIOR TO CONSTRUCTION AND ADJUST IF NECESSARY.
5. EXISTING 8" HIGH PRESSURE GAS. CONTRACTOR TO PROTECT AND PROVIDE TEMPORARY SUPPORT DURING CONSTRUCTION. USE EXTREME CAUTION DUE TO SAFETY HAZARD.
6. EXISTING 20" OPL GAS LINE. CONTRACTOR TO PROTECT AND PROVIDE TEMPORARY SUPPORT DURING CONSTRUCTION. USE EXTREME CAUTION DUE TO SAFETY HAZARD.
7. CONNECT EXISTING PIPE TO NORTH TO NEW CB. REMOVE PIPE TO SOUTH AS NEEDED FOR CONSTRUCTION, AND FILL REMAINDER WITH CDF AND ABANDON.
8. CONNECT EXISTING PIPE TO NORTHWEST TO NEW CB. FILL PIPE TO SOUTHEAST WITH CDF AND ABANDON.
9. EXISTING 36" SPU WATER MAIN. CONTRACTOR TO PROTECT AND AVOID DISTURBANCE TO PIPE AND BEDDING DURING CONSTRUCTION.
10. REMOVE AND REPLACE EXISTING CATCH BASIN. FILL PIPE TO NORTHEAST WITH CDF AND ABANDON.
11. REMOVE EXISTING CATCH BASIN. FILL ALL CONNECTING PIPES WITH CDF AND ABANDON.
12. FILL PIPE WITH CDF AND ABANDON.

1"=10' Scale: 10 5 0 10 20 Feet

1"=2.5' Scale: 2.5 1.25 0 2.5 5 Feet

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NO	DATE	BY	APPR	REVISIONS
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DESIGN MANAGER DATE

PROJECT MANAGER DATE

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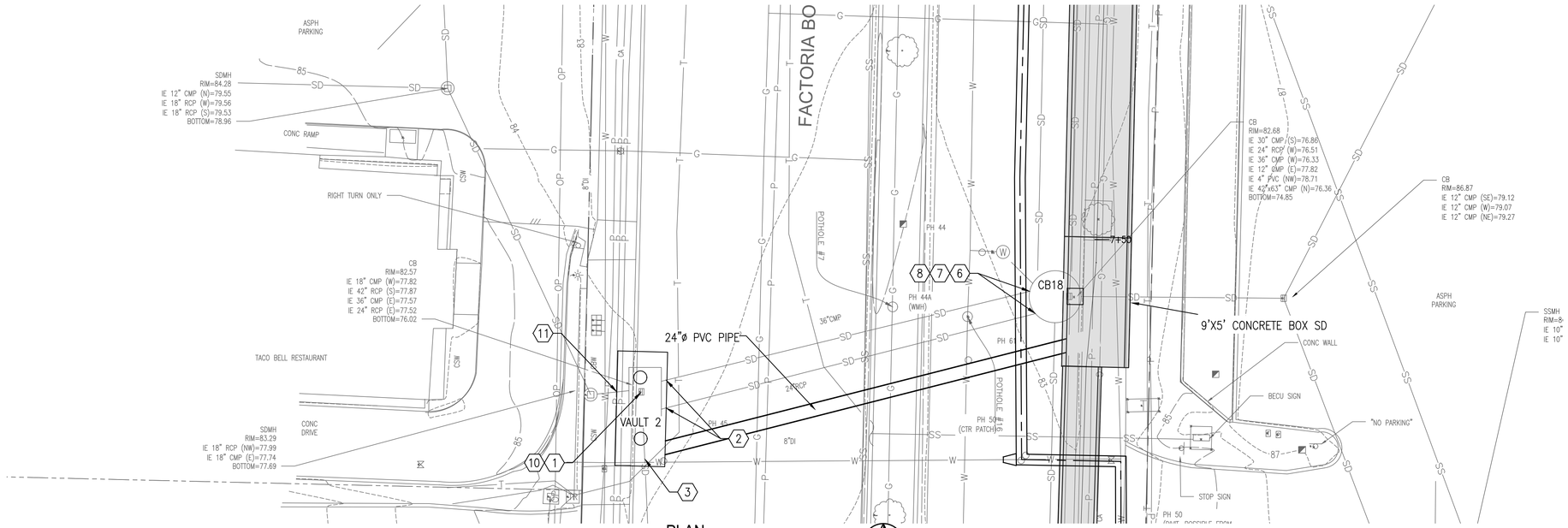
DESIGNED BY	DATE
JAMES ELLIS	03/03/20
DRAWN BY	DATE
MIKE GISEBURT	03/03/20
CHECKED BY	DATE

City of Bellevue
UTILITIES

FACTORIA BOULEVARD STORM CONVEYANCE IMPROVEMENTS PROJECT
ST4 STORMWATER LATERAL PLAN AND PROFILE 1 OF 3

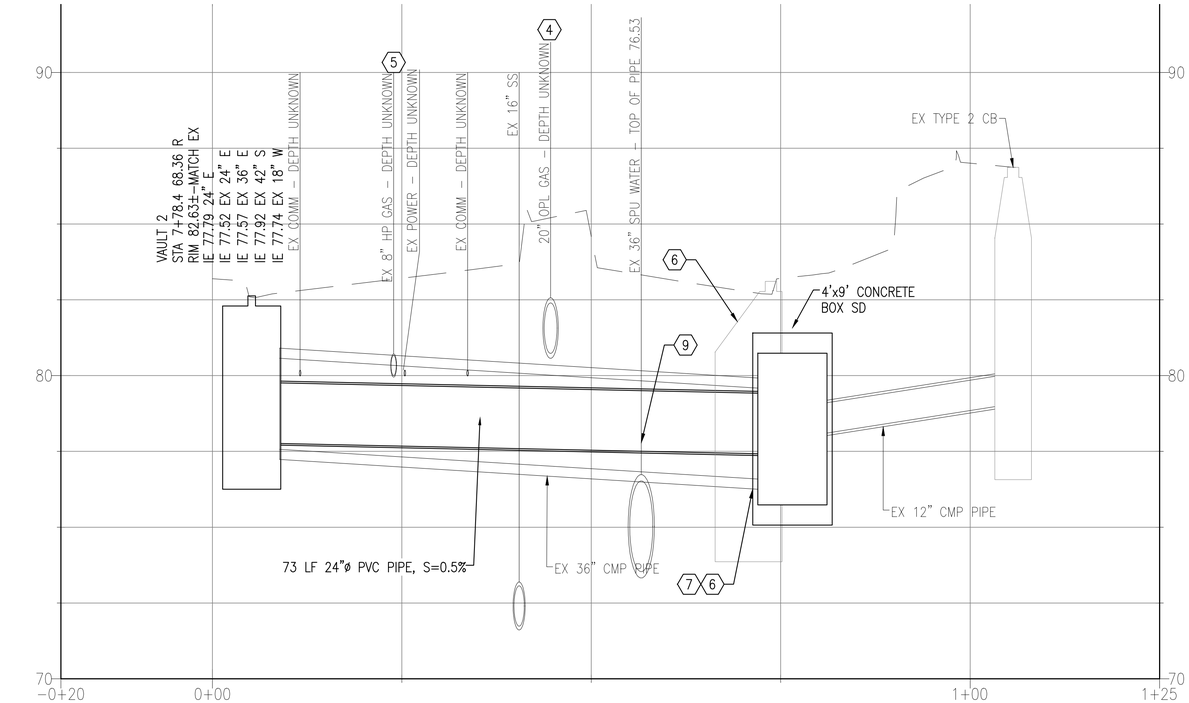
SEC 27, T 25N, R 5E | SHT 11 OF 42

Ellis, James – 3/3/2020 2:43 PM – C:\Users\JEllis\Desktop\30% Submittal\11 ST4 STORMWATER LATERAL PLAN AND PROFILE 1 OF 3.dwg



PLAN

STORM SYSTEM IMPROVEMENTS
SCALE: 1"=10'



PROFILE

LATERAL 2 – APPROX STA 7+60
HORIZ SCALE: 1"=10'
VERT SCALE: 1"=2.5'

GENERAL NOTES

1. SEE GENERAL STORMWATER NOTES ON DWG G2.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND POTHOLING ALL UTILITIES NOT PREVIOUSLY POTHOLED WITHIN EXCAVATION LIMITS, WHICH SHALL BE INCIDENTAL TO PIPE BID ITEMS. WHERE ADDITIONAL SITE SPECIFIC POTHOLING IS REQUIRED BY THE PLANS OR REQUESTED BY ENGINEER, IT SHALL BE PAID FOR BY "SITE SPECIFIC POTHOLING".
3. SEE DWG ST8 FOR UTILITY POTHOLE DATA.
4. SEE DWG ST8 FOR STORM STRUCTURE DATA.
5. STATION/OFFSET LOCATION CALLOUTS AND RIM ELEVATIONS PROVIDED ARE AT THE CENTER OF THE DRAINAGE STRUCTURE UNLESS OTHERWISE NOTED.
6. LIMIT DISTURBANCE TO ONLY THOSE AREAS NECESSARY FOR CONSTRUCTING THE PROPOSED IMPROVEMENTS.
7. ALL STRUCTURE STATION AND OFFSET CALLOUTS ARE RELATIVE TO THE MAIN TRUNK ALIGNMENT.
7. EXISTING TELECOMM AND CABLE LINES (FIBER OPTIC, COPPER, AND CONDUIT) NOT SHOWN IN PROFILES. TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTES

1. REMOVE EXISTING CB AND REPLACE WITH NEW 6' W X 16' L X 6.5' H VAULT.
2. CONNECT EXISTING 24" AND 36" SD TO NEW VAULT.
3. CIONNECT EXISTING 42" SD TO NEW VAULT.
4. EXISTING 20" OPL GAS LINE. CONTRACTOR TO PROTECT AND PROVIDE TEMPORARY SUPPORT DURING CONSTRUCTION. USE EXTREME CAUTION DUE TO SAFETY HAZARD.
5. EXISTING 8" HIGH PRESSURE GAS. CONTRACTOR TO PROTECT AND PROVIDE TEMPORARY SUPPORT DURING CONSTRUCTION. USE EXTREME CAUTION DUE TO SAFETY HAZARD.
6. CORE DRILL AND EXTEND EXISTING 24" AND 36" SD TO CONNECT TO NEW BOX SD.
7. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING SD PIPES PRIOR TO CONSTRUCTING STORM IMPROVEMENTS.
8. REMOVE AND DISPOSE OF EXISTING STORM STRUCTURE.
9. ELEVATION OF SPU WATER MAIN BASED ON POTHOLE 16. DUE TO CONFLICT WITH EXISTING STORM DEPTH WILL BE VERIFIED WITH ADDITIONAL POTHOLES.
10. PRELIMINARY ARRANGEMENT OF NEW STORM STRUCTURE PENDING INFORMATION ON CITY WATER LINE AND FRANCHISE UTILITIES.
11. CONNECT EXISTING 18" SD TO NEW VAULT.

1"=10' Scale: 10 5 0 10 20 Feet

1"=2.5' Scale: 2.5 1.25 0 2.5 5 Feet

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JAMES ELLIS	03/03/20
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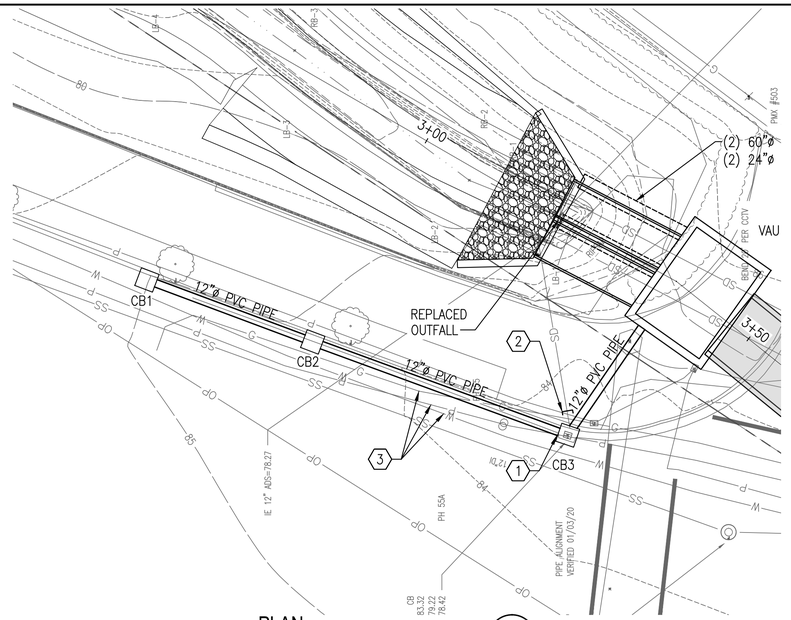
MIKE GISEBURT	03/03/20
CHECKED BY	DATE

City of Bellevue
UTILITIES

FACTORIA BOULEVARD STORM
CONVEYANCE IMPROVEMENTS PROJECT
ST5 STORMWATER LATERAL PLAN AND PROFILE 2 OF 3

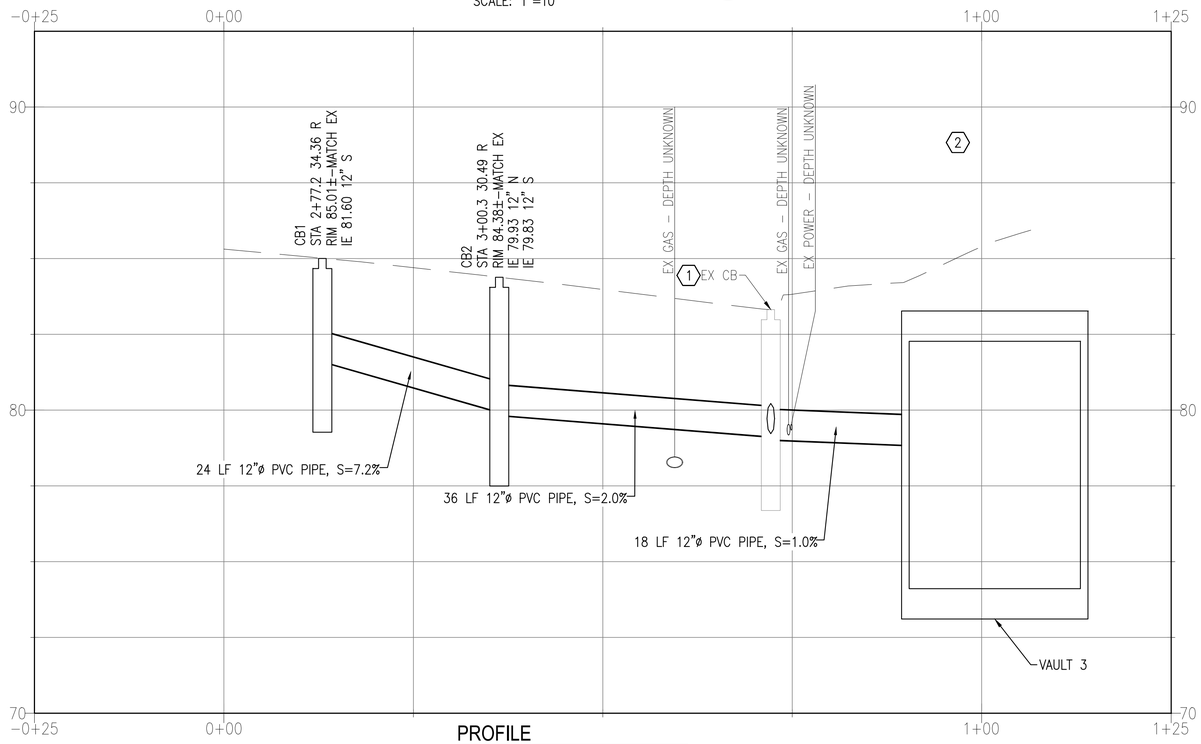
SEC 27, T 25N, R 5E | SHT 12 OF 42

Ellis, James – 3/3/2020 2:44 PM – C:\Users\JEllis\Desktop\30% Submittal\12 ST5 STORMWATER LATERAL PLAN AND PROFILE 2 OF 3.dwg



PLAN

STORM SYSTEM IMPROVEMENTS
SCALE: 1"=10'



PROFILE

NORTH END INLET IMPROVEMENTS
HORIZ SCALE: 1"=10'
VERT SCALE: 1"=2.5'

GENERAL NOTES

1. SEE GENERAL STORMWATER NOTES ON DWG G2.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND POTHOLING ALL UTILITIES NOT PREVIOUSLY POTHOLED WITHIN EXCAVATION LIMITS, WHICH SHALL BE INCIDENTAL TO PIPE BID ITEMS. WHERE ADDITIONAL SITE SPECIFIC POTHOLING IS REQUIRED BY THE PLANS OR REQUESTED BY ENGINEER, IT SHALL BE PAID FOR BY "SITE SPECIFIC POTHOLING".
3. SEE DWG ST8 FOR UTILITY POTHOLE DATA.
4. SEE DWG ST8 FOR STORM STRUCTURE DATA.
5. STATION/OFFSET LOCATION CALLOUTS AND RIM ELEVATIONS PROVIDED ARE AT THE CENTER OF THE DRAINAGE STRUCTURE UNLESS OTHERWISE NOTED.
6. LIMIT DISTURBANCE TO ONLY THOSE AREAS NECESSARY FOR CONSTRUCTING THE PROPOSED IMPROVEMENTS.
7. ALL STRUCTURE STATION AND OFFSET CALLOUTS ARE RELATIVE TO THE MAIN TRUNK ALIGNMENT.

CONSTRUCTION NOTES

1. CONNECT NEW 12" SD TO EXISTING CB.
2. CONNECT EXISTING 12" SD TO NEW CB. CAP EXISTING SD NORTH OF CB3, FILL WITH CDF AND ABANDON.
3. EXISTING POWER, GAS, WATER, AND WATER LINES TO BE PROTECTED IN PLACE

1"=10' Scale: 10 5 0 10 20 Feet

1"=2.5' Scale: 2.5 1.25 0 2.5 5 Feet

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NO	DATE	BY	APPR	REVISIONS
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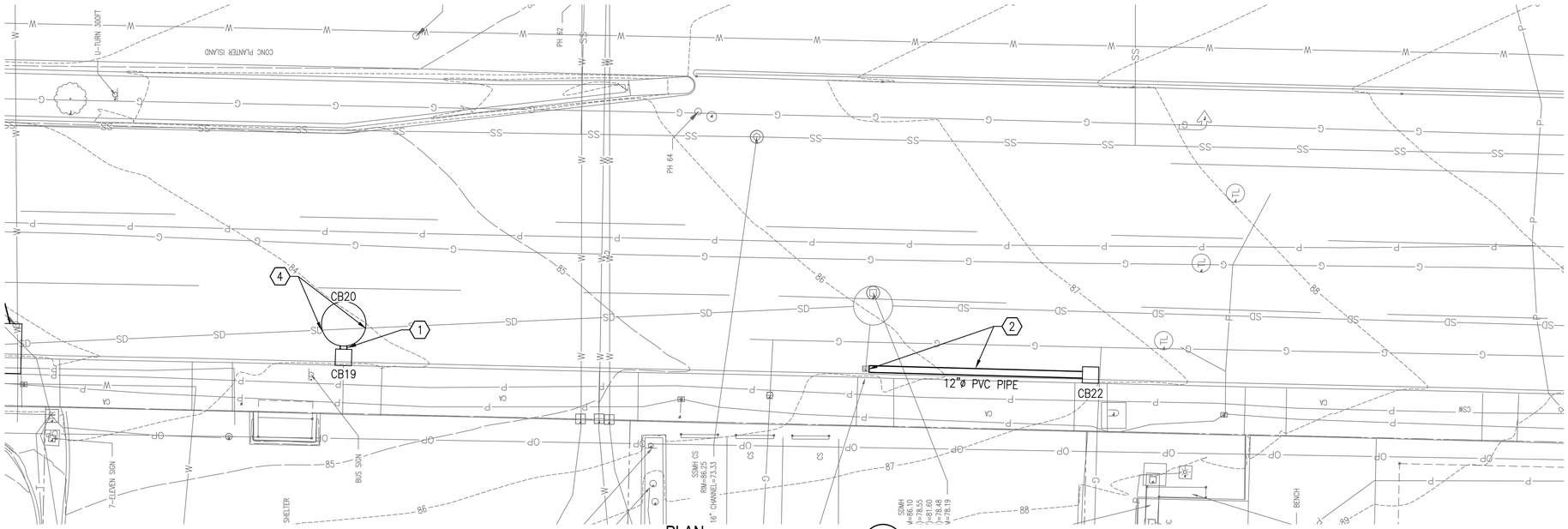
City of Bellevue
UTILITIES

FACTORIA BOULEVARD STORM CONVEYANCE IMPROVEMENTS PROJECT
ST6 STORMWATER LATERAL PLAN AND PROFILE 3 OF 3

SEC 27, T 25N, R 5E

SHT 13 OF 42

Ellis, James – 3/3/2020 2:44 PM – C:\Users\JEllis\Desktop\30% Submittal\13 ST6 STORMWATER LATERAL PLAN AND PROFILE 3 OF 3.dwg



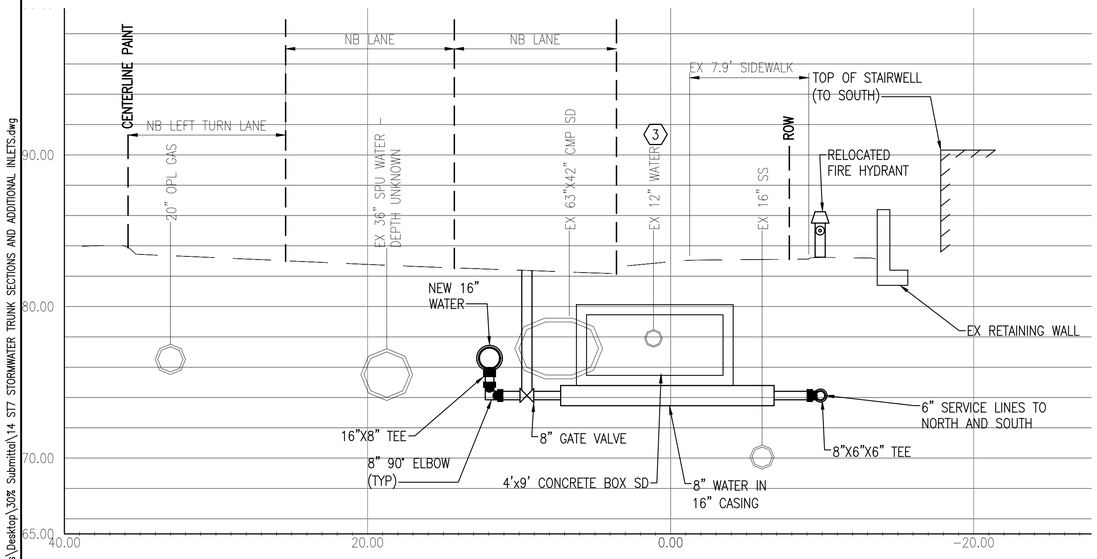
PLAN
SOUTH END INLET IMPROVEMENTS
SCALE: 1"=10'

GENERAL NOTES

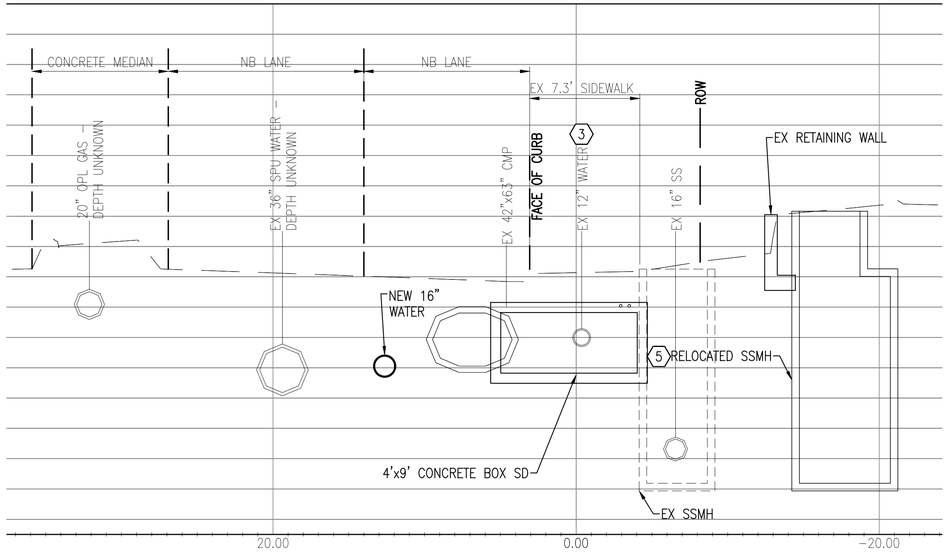
1. SEE GENERAL STORMWATER NOTES ON DWG G2.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND POTHOLING ALL UTILITIES NOT PREVIOUSLY POTHOLED WITHIN EXCAVATION LIMITS, WHICH SHALL BE INCIDENTAL TO PIPE BID ITEMS. WHERE ADDITIONAL SITE SPECIFIC POTHOLING IS REQUIRED BY THE PLANS OR REQUESTED BY ENGINEER, IT SHALL BE PAID FOR BY "SITE SPECIFIC POTHOLING".
3. SEE DWG ST8 FOR UTILITY POTHOLE DATA.
4. SEE DWG ST8 FOR STORM STRUCTURE DATA.
5. STATION/OFFSET LOCATION CALLOUTS AND RIM ELEVATIONS PROVIDED ARE AT THE CENTER OF THE DRAINAGE STRUCTURE.
6. FRANCHISE UTILITIES NOT SHOWN ON CROSS SECTIONS FOR CLARITY.

CONSTRUCTION NOTES

1. CONNECT CB19 TO CB20 WITH 1 LF 12" CONCRETE SD, IE 78.13.
2. CONNECT CB22 TO EXISTING CB WITH 33 LF 12" CONCRETE SD. IE AT CB22 83, IE AT EXISTING CB 82.47.
3. EXISTING 12" WATER TO BE RELOCATED. SEE DWGS ST1 THROUGH ST3.
4. REMOVE EXISTING SD AS NECESSARY TO INSTALL NEW CB. CONNECT NEW CB TO EXISTING SD TO NORTH AND SOUTH.
5. EXISTING 16" SS MAIN AND MH TO BE RELOCATED. SEE DWG ST2.



SECTION - STA 4+83.73 (1 / ST1)
SCALE: 1"=5'



SECTION - STA 6+54.55 (2 / ST2)
SCALE: 1"=5'

1"=10' — 10 5 0 10 20 — Scale Feet
1"=5' — 5 2.5 0 5 10 — Scale Feet

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BEFORE YOU DIG
1-800-424-5555

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CHECKED BY	DATE

City of Bellevue
UTILITIES

FACTORIA BOULEVARD STORM
CONVEYANCE IMPROVEMENTS PROJECT
ST7 STORMWATER TRUNK SECTIONS AND
ADDITIONAL INLETS

SEC 27, T 25N, R 5E | SHT 14 OF 42

Ellis, James – 3/3/2020 2:45 PM – C:\Users\JEllis\Desktop\30% Submittal\14 ST7 STORMWATER TRUNK SECTIONS AND ADDITIONAL INLETS.dwg

NO.	CENTER OF STRUCTURE NORTHING	CENTER OF STRUCTURE EASTING	STRUCTURE TYPE, DETAIL REFERENCE	FRAME & LID/GRATE TYPE, DETAIL REFERENCE	NOTES
VAULT 1	213588.9214	1310618.1778	2'X16' CONCRETE VAULT, SEE DETAIL _ ON DWG _	TWO (2) CIRCULAR FRAMES (RINGS) AND COVERS. SEE COB STD PLAN D-21	SUMP DEPTH TO BE BETWEEN 1 AND 2 FT BELOW LOWEST STORM DRAIN INVERT
VAULT 2	213415.4834	1310612.8210	6'X16' CONCRETE VAULT, SEE DETAIL _ ON DWG _	TWO (2) CIRCULAR FRAMES (RINGS) AND COVERS. SEE COB STD PLAN D-21	SUMP DEPTH TO BE BETWEEN 1 AND 2 FT BELOW LOWEST STORM DRAIN INVERT
VAULT 3	213836.6200	1310730.6040	10'X14' CONCRETE VAULT, SEE DETAIL _ ON DWG _	TWO (2) CIRCULAR FRAMES (RINGS) AND COVERS. SEE COB STD PLAN D-21	SUMP DEPTH TO BE BETWEEN 1 AND 2 FT BELOW LOWEST STORM DRAIN INVERT
MH1	213733.3900	1310692.3239	ACCESS RISER, 48" - SEE DETAIL 2 ON DWG ST11	CIRCULAR FRAME (RING) AND COVER, SEE COB STD PLAN D-21	
MH2	213587.7305	1310688.9883	ACCESS RISER, 48" - SEE DETAIL 2 ON DWG ST11	CIRCULAR FRAME (RING) AND COVER, SEE COB STD PLAN D-21	
MH3	213279.1868	1310676.9964	ACCESS RISER, 48" - SEE DETAIL 2 ON DWG ST11	CIRCULAR FRAME (RING) AND COVER, SEE COB STD PLAN D-21	
MH4	213811.4063	1310712.5072	ACCESS RISER, 48" - SEE DETAIL 2 ON DWG ST11	RECTANGULAR VANED GRATE, SEE COB STD PLAN D-6	
CB1	213909.3329	1310732.3191	CATCH BASIN TYPE 1, SEE COB STD PLAN D-2	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB2	213887.4521	1310724.1450	CATCH BASIN TYPE 1, SEE COB STD PLAN D-2	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB3	213853.8080	1310711.8340	CATCH BASIN TYPE 1, SEE COB STD PLAN D-2	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB4	213788.0863	1310706.4064	CATCH BASIN TYPE 1, SEE COB STD PLAN D-2	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB5	213742.3868	1310686.7818	CONCRETE INLET - SEE DETAIL 1 ON DWG ST11	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB6	213687.2616	1310685.4899	CONCRETE INLET - SEE DETAIL 1 ON DWG ST11	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB7	213635.7553	1310684.2618	CONCRETE INLET - SEE DETAIL 1 ON DWG ST11	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB8	213618.7672	1310626.5494	CATCH BASIN TYPE 1, SEE COB STD PLAN D-2	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB9	213600.0276	1310683.5894	CONCRETE INLET - SEE DETAIL 1 ON DWG ST11	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB10	213572.2316	1310616.8296	CATCH BASIN TYPE 1-L, SEE COB STD PLAN D-3	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB11	213563.7656	1310682.7228	CONCRETE INLET - SEE DETAIL 1 ON DWG ST11	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB12	213557.4663	1310682.5562	CONCRETE INLET - SEE DETAIL 1 ON DWG ST11	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB13	213551.0330	1310682.3701	CONCRETE INLET - SEE DETAIL 1 ON DWG ST11	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB14	213552.8766	1310615.8707	CATCH BASIN TYPE 1, SEE COB STD PLAN D-2	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB15	213541.8445	1310615.6261	CATCH BASIN TYPE 1, SEE COB STD PLAN D-2	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB16	213486.3997	1310614.3019	CATCH BASIN TYPE 1, SEE COB STD PLAN D-2	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB17	213485.3741	1310680.9321	CONCRETE INLET - SEE DETAIL 1 ON DWG ST11	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB18	213432.8225	1310679.7310	CONCRETE INLET - SEE DETAIL 1 ON DWG ST11	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB19	213357.0604	1310611.2812	CATCH BASIN TYPE 2 72", SEE COB STD PLAN D-4	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB20	213357.0248	1310616.4268	CATCH BASIN TYPE 1, SEE COB STD PLAN D-2	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB21	213333.5430	1310677.3005	CONCRETE INLET - SEE DETAIL 1 ON DWG ST11	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB22	213242.0584	1310608.5563	CATCH BASIN TYPE 2 72", SEE COB STD PLAN D-4	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	
CB23	213196.3454	1310673.9644	CONCRETE INLET - SEE DETAIL 1 ON DWG ST11	THROUGH-CURB INLET W/ VANED GRATE, SEE COB STD PLANS D-6 AND D-10	

EXISTING UTILITY DATA

POTHOLE ID NO.	UTILITY TYPE	SIZE	MATERIAL	GROUND EL.	TOP EL.	BOTTOM EL.	PAVEMENT DEPTH AND TYPE
1	GAS	20"	STEEL	82.43	77.35	75.68	16" ASPHALT
2	GAS	20"	STEEL	86.17	80.20	78.83	15" ASPHALT
3A	WATER	12"	DI	83.20	78.37	77.37	15" ASPHALT
3B	POWER	(3) 2"	PVC	83.20	80.20	80.03	15" ASPHALT
7	GAS	24"		85.19			SOIL OVER CONCRETE SLAB
8	WATER	8"	DI	84.72	79.55	78.89	
15	WATER	12"	DI	89.70	84.03	83.03	13" ASPHALT
16	WATER	36"	CONC	83.17	77.58	74.58	18" ASPHALT
21	GAS	2"	PE	82.79	79.71	79.54	
37	WATER	12"	DI	83.20	80.12	79.12	
38	WATER	36"	CONC	82.02	77.52	74.52	12" ASPHALT
43	WATER			82.31			14.5" ASPHALT
44	WATER		STEEL	82.82	72.99		16.5" ASPHALT
45	WATER	8"	DI	82.80	77.63	76.63	8" ASPHALT
50	WATER	12"	DI	83.06	78.56	77.56	11" ASPHALT
51	WATER	16"	DI	83.72	79.72	78.39	6.5" CONCRETE
55	WATER			83.51			7" CONCRETE
61	WATER	36"	CONC	83.24	76.74		15" ASPHALT
62	WATER	16"	DI	84.96	80.46	78.79	13" ASPHALT
63	WATER	36"	CONC	84.68	79.85	76.85	11" ASPHALT
64	GAS	20"	STEEL	86.02	80.10	78.44	10" ASPHALT
67	WATER	36"	CONC	82.80	77.88	74.88	15" ASPHALT
68	WATER	36"	CONC	83.60	77.93	74.93	15" ASPHALT
69A	STORM	63"X42"	CMP	83.95	78.37	74.37	
70				82.62			

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520 Pike St, Ste 1005, Seattle, WA 98101 · 206.453.1043

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Approved By

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CHECKED BY	DATE

City of Bellevue
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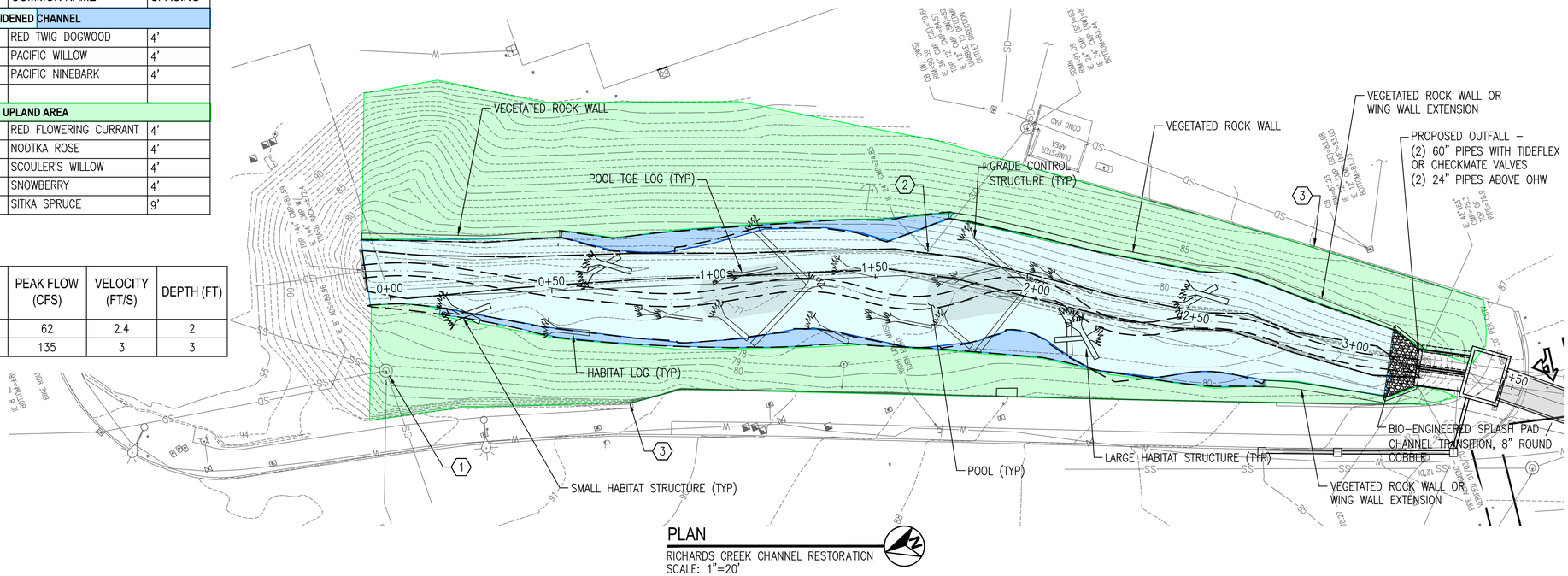
FACTORIA BOULEVARD STORM
CONVEYANCE IMPROVEMENTS PROJECT
ST8 STORM AND SANITARY STRUCTURE
SCHEDULE AND POTHOLE DATA

SEC 27, T 25N, R 5E | SHT 15 OF 42

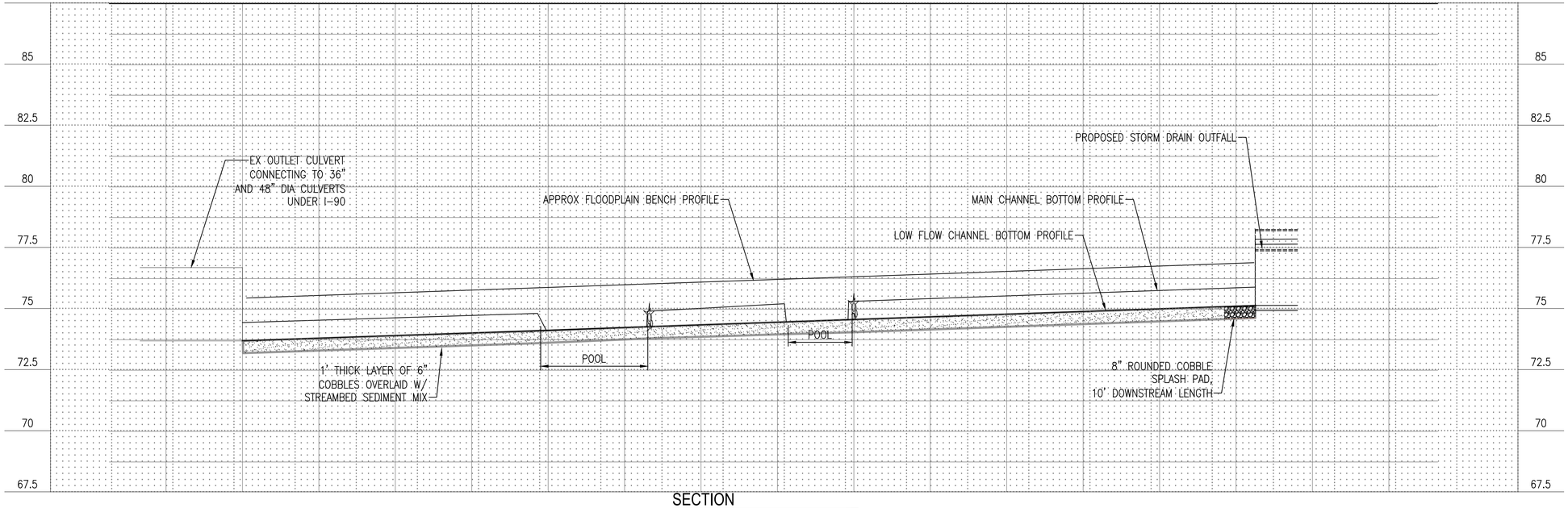
Ellis, James - 3/3/2020 3:14 PM - C:\Users\JEllis\Desktop\30% Submittal\15 STB STORM AND SANITARY STRUCTURE SCHEDULE AND POTHOLE DATA.dwg

BOTANICAL NAME	COMMON NAME	SPACING
WIDENED CHANNEL		
CORNUS SERICEA	RED TWIG DOGWOOD	4'
SALIX LUCIDA	PACIFIC WILLOW	4'
PYSOCARPUS CAPITATUS	PACIFIC NINEBARK	4'
UPLAND AREA		
RIBES SANGUINEUM	RED FLOWERING CURRANT	4'
ROSA NUTKANA	NOOTKA ROSE	4'
SALIX SCOULERIANA	SCOULER'S WILLOW	4'
SYMPHORICARPOS ALBUS	SNOWBERRY	4'
PICEA SITCHENSIS	SITKA SPRUCE	9'

STORM FREQUENCY	PEAK FLOW (CFS)	VELOCITY (FT/S)	DEPTH (FT)
2-YEAR	62	2.4	2
100-YEAR	135	3	3



PLAN
RICHARDS CREEK CHANNEL RESTORATION
SCALE: 1"=20'



SECTION
RICHARDS CREEK CHANNEL RESTORATION
HORIZ SCALE: 1"=20'
VERT SCALE: 1"=5'

GENERAL NOTES
1. EXISTING EAST BANK OF RICHARDS CREEK INCLUDES SIGNIFICANT ROCK. CONTRACTOR TO AVOID DISTURBING EAST BANK. ANY DISTURBANCE SHALL BE APPROVED BY ENGINEER.

CONSTRUCTION NOTES
1. PROTECT EXISTING SANITARY MANHOLE.
2. PROTECT EXISTING STORM DRAIN OUTFALL.
3. PROPOSED WORK ACCESS LOCATION.

1"=20' Scale: 20 10 0 20 40 Feet

1"=5' Scale: 5 2.5 0 5 10 Feet

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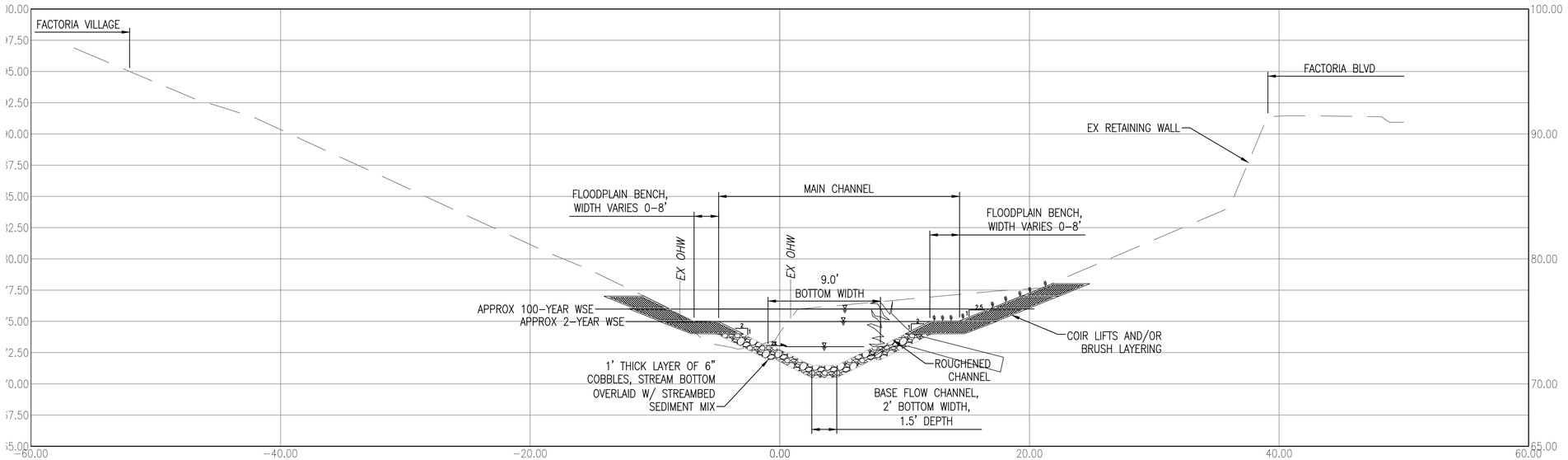
FACTORIA BOULEVARD STORM CONVEYANCE IMPROVEMENTS PROJECT
ST9 RICHARDS CREEK PLAN AND PROFILE

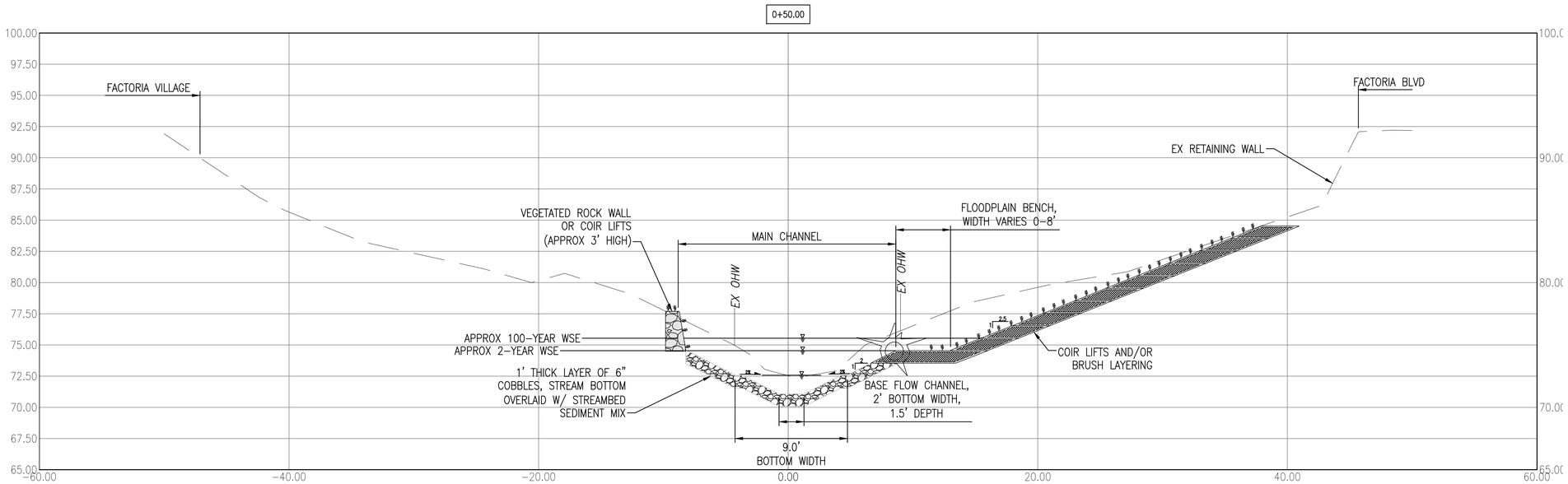
SEC 27, T 25N, R 5E | SHT 16 OF 42

Ellis, James – 3/3/2020 2:45 PM – C:\Users\JEllis\Desktop\30% Submittal\16 ST9 RICHARDS CREEK PLAN AND PROFILE.dwg



SECTION

RICHARDS CREEK TYPICAL CHANNEL SECTION
SCALE: 1"=5'



SECTION

RICHARDS CREEK TYPICAL CHANNEL SECTION
WITH VEGETATED ROCK WALL
SCALE: 1"=5'

GENERAL NOTES

1. –

CONSTRUCTION NOTES

1 –

1"=5' 5 2.5 0 5 10
Scale Feet

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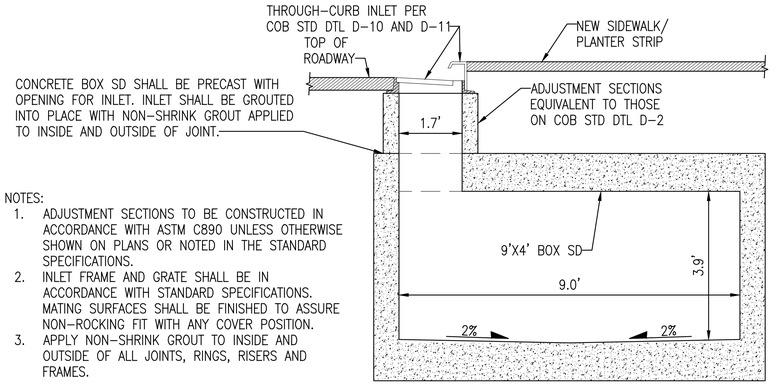
FACTORIA BOULEVARD STORM CONVEYANCE IMPROVEMENTS PROJECT
ST10 RICHARDS CREEK CROSS SECTIONS

SEC 27, T 25N, R 5E | SHT 17 OF 42

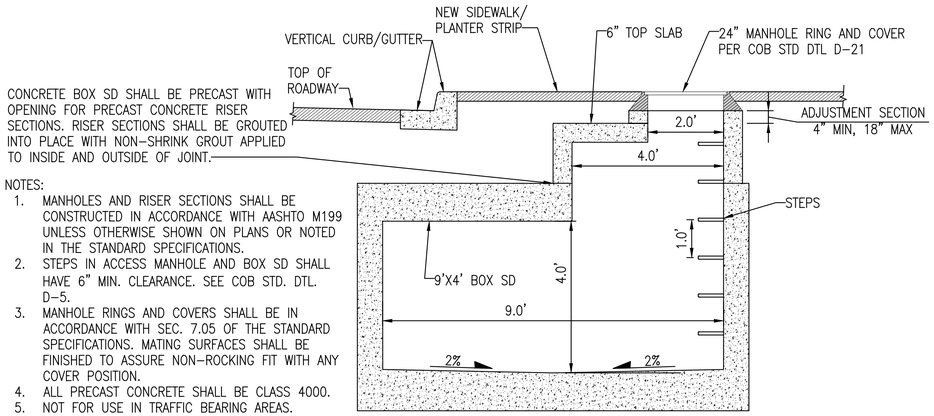
Ellis, James – 3/3/2020 2:46 PM – C:\Users\JEllis\Desktop\30% Submittal\17 ST10 RICHARDS CREEK CROSS SECTIONS.dwg



NOTES:
1. ADJUSTMENT SECTIONS TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C890 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE STANDARD SPECIFICATIONS.
2. INLET FRAME AND GRATE SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS. MATING SURFACES SHALL BE FINISHED TO ASSURE NON–ROCKING FIT WITH ANY COVER POSITION.
3. APPLY NON–SHRINK GROUT TO INSIDE AND OUTSIDE OF ALL JOINTS, RINGS, RISERS AND FRAMES.

DETAIL 1

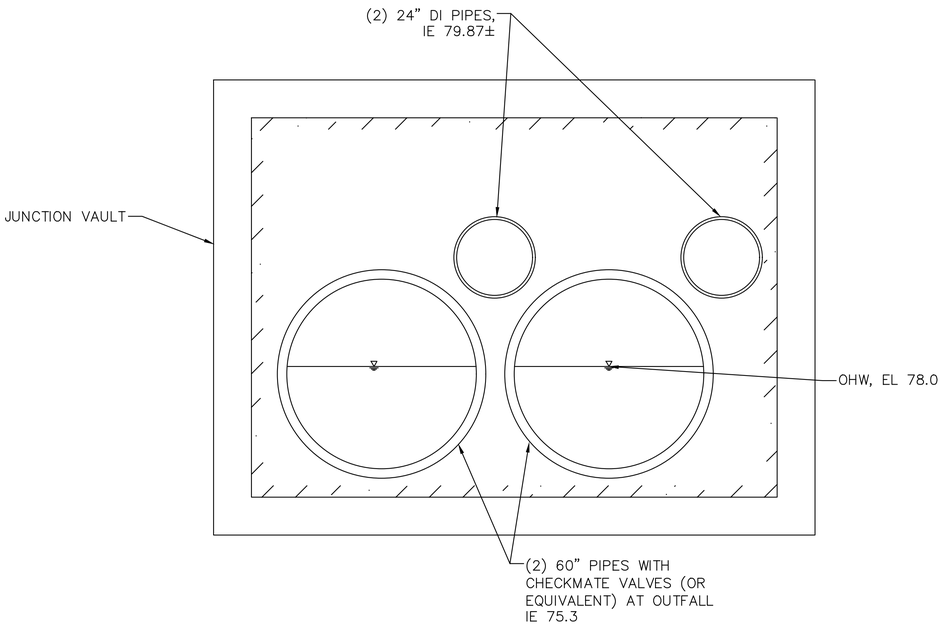
THROUGH–CURB INLET ON BOX SD
SCALE: NTS



NOTES:
1. MANHOLES AND RISER SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH AASHTO M199 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE STANDARD SPECIFICATIONS.
2. STEPS IN ACCESS MANHOLE AND BOX SD SHALL HAVE 6" MIN. CLEARANCE. SEE COB STD. DTL. D–5.
3. MANHOLE RINGS AND COVERS SHALL BE IN ACCORDANCE WITH SEC. 7.05 OF THE STANDARD SPECIFICATIONS. MATING SURFACES SHALL BE FINISHED TO ASSURE NON–ROCKING FIT WITH ANY COVER POSITION.
4. ALL PRECAST CONCRETE SHALL BE CLASS 4000.
5. NOT FOR USE IN TRAFFIC BEARING AREAS.
6. APPLY NON–SHRINK GROUT TO INSIDE AND OUTSIDE OF ALL JOINTS, RISERS, RINGS AND FRAMES.

DETAIL 2

ACCESS MANHOLE
SCALE: NTS



DETAIL 3

STORM OUTFALL
SCALE: NTS

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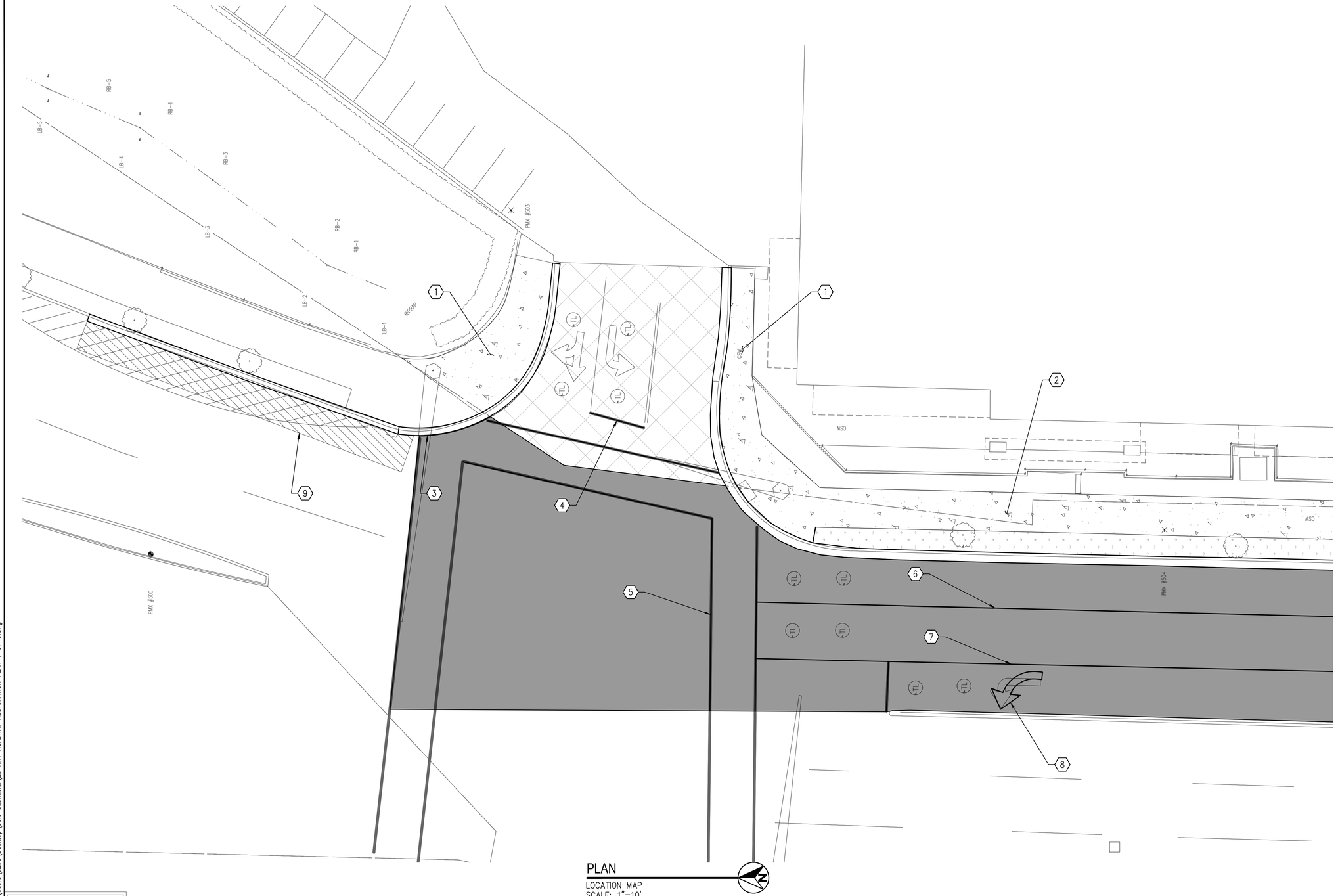
FACTORIA BOULEVARD STORM CONVEYANCE IMPROVEMENTS PROJECT

ST11 STORM INLET AND STRUCTURE DETAILS

SEC 27, T 25N, R 5E | SHT 18 OF 42

Ellis, James – 3/3/2020 2:46 PM – C:\Users\JEllis\Desktop\30% Submittal\18 ST11 STORM INLET AND STRUCTURE DETAILS.dwg



PLAN
LOCATION MAP
SCALE: 1"=10'

CONSTRUCTION NOTES

1. REMOVE AND REPLACE CURBSIDE SIDEWALK TO NEAREST EXISTING JOINT. SEE COB DWG SW-110-1.
2. REMOVE AND REPLACE SIDEWALK WITH PLANTER STRIP TO NEAREST EXISTING JOINT. SEE COB DWG SW-110-1.
3. REMOVE AND REPLACE CEMENT CONCRETE CURB AND GUTTER TO NEAREST EXISTING JOINT. SEE COB DWG SW-100-1. (TYP)
4. REMOVE AND REPLACE EXISTING STOP BAR. (TYP)
5. REMOVE AND REPLACE EXISTING CROSSWALK. (TYP)
6. REMOVE AND REPLACE EXISTING BROKEN LANE LINE. SEE COB DWG CH-100-1.
7. REMOVE AND REPLACE EXISTING SOLID LANE LINE. SEE COB DWG CH-100-1
8. REMOVE AND REPLACE LEFT TURN ARROW. SEE COB DWG CH-170-1.
9. RESTORE TRENCH AREA. SEE COB DWG RC-200-1.

- FULL-DEPTH OVERLAY (PUBLIC ROW)
- FULL-DEPTH OVERLAY (PRIVATE)
- TRENCH RESTORATION (LONGITUDINAL)
- CEMENT CONCRETE SIDEWALK
- LANDSCAPING

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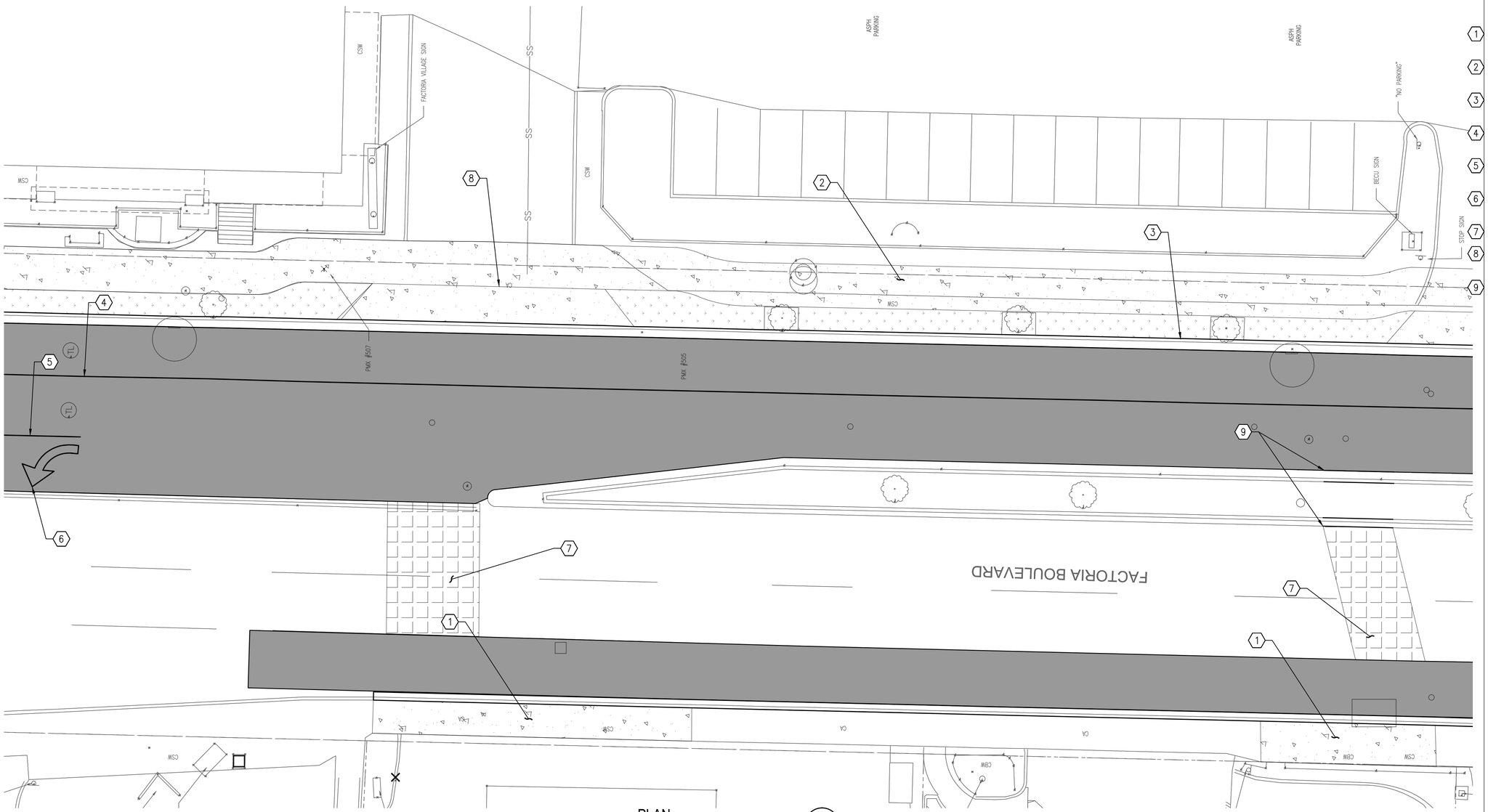
FACTORIA BOULEVARD STORM
CONVEYANCE IMPROVEMENTS PROJECT
28 - RR1 ROADWAY RESTORATION PLAN, SHEET 1 OF 3

SEC 27, T 25N, R 5E | SHT 29 OF 42

Ellis, James – 3/3/2020 2:46 PM – C:\Users\JEllis\Desktop\30% Submittal\28 RR1 ROADWAY RESTORATION PLAN 1 OF 3.dwg



PLAN
LOCATION MAP
SCALE: 1"=10'

CONSTRUCTION NOTES

1. REMOVE AND REPLACE CURBSIDE SIDEWALK TO NEAREST EXISTING JOINT. SEE COB DWG SW-110-1.
2. REMOVE AND REPLACE SIDEWALK WITH PLANTER STRIP TO NEAREST EXISTING JOINT. SEE COB DWG SW-110-1.
3. REMOVE AND REPLACE CEMENT CONCRETE CURB AND GUTTER TO NEAREST EXISTING JOINT. SEE COB DWG SW-100-1. (TYP)
4. REMOVE AND REPLACE EXISTING BROKEN LANE LINE. SEE COB DWG CH-100-1.
5. REMOVE AND REPLACE EXISTING SOLID LANE LINE. SEE COB DWG CH-100-1
6. REMOVE AND REPLACE LEFT TURN ARROW. SEE COB DWG CH-170-1.
7. RESTORE TRENCH AREA. SEE COB DWG RC-200-1.
8. REMOVE AND REPLACE TYPE 2 DRIVEWAY. SEE COB DWG SW-150-1.
9. REMOVE AND REPLACE MEDIAN IN KIND.

FULL-DEPTH OVERLAY (PUBLIC ROW)

FULL-DEPTH OVERLAY (PRIVATE)

TRENCH RESTORATION (LATERAL)

CEMENT CONCRETE SIDEWALK

LANDSCAPING

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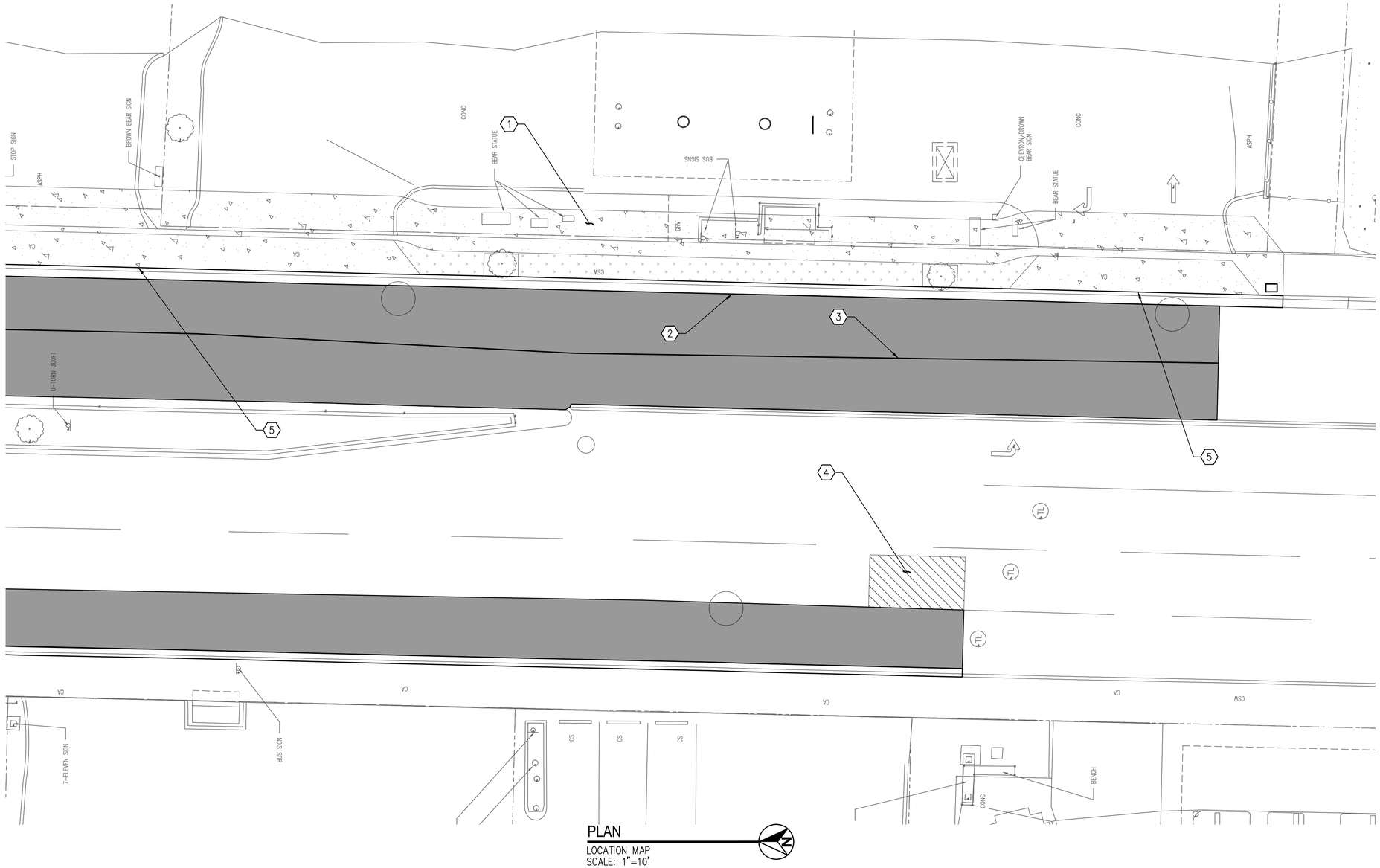
FACTORIA BOULEVARD STORM
CONVEYANCE IMPROVEMENTS PROJECT
29 - RR2 ROADWAY RESTORATION PLAN, SHEET 2 OF 3

SEC 27, T 25N, R 5E | SHT 30 OF 42

Ellis, James - 3/3/2020 2:46 PM - C:\Users\JEllis\Desktop\30% Submittal\29 RR2 ROADWAY RESTORATION PLAN 2 OF 3.dwg



PLAN

LOCATION MAP
SCALE: 1"=10'

CONSTRUCTION NOTES

1. REMOVE AND REPLACE SIDEWALK WITH PLANTER STRIP TO NEAREST EXISTING JOINT. SEE COB DWG SW-110-1.
2. REMOVE AND REPLACE CEMENT CONCRETE CURB AND GUTTER TO NEAREST EXISTING JOINT. SEE COB DWG SW-100-1. (TYP)
3. REMOVE AND REPLACE EXISTING BROKEN LANE LINE. SEE COB DWG CH-100-1.
4. RESTORE TRENCH AREA. SEE COB DWG RC-200-1.
5. REMOVE AND REPLACE TYPE 2 DRIVEWAY. SEE COB DWG SW-150-1.

- FULL-DEPTH OVERLAY (PUBLIC ROW)
- FULL-DEPTH OVERLAY (PRIVATE)
- TRENCH RESTORATION (LONGITUDINAL)
- CEMENT CONCRETE SIDEWALK
- LANDSCAPING

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FACTORIA BOULEVARD STORM
CONVEYANCE IMPROVEMENTS PROJECT
30 - RR3 ROADWAY RESTORATION PLAN, SHEET 3 OF 3

SEC 27, T 25N, R 5E | SHT 31 OF 42

Ellis, James - 3/3/2020 2:47 PM - C:\Users\JEllis\Desktop\30% Submittal\30 RR3 ROADWAY RESTORATION PLAN 3 OF 3.dwg

ATTACHMENT B:

MEMORANDUM FIGURES

Memorandum

Date:	April 6, 2020
Subject:	Factoria Boulevard Storm Conveyance Improvements Project – Conceptual Mitigation Plan
To:	Birol Shaha – City of Bellevue Utilities
From:	Brandon Stimac, Dan Roscoe – WSP
CC:	Jay Cammermeyer – WSP

The City of Bellevue Utilities Department is developing a capital project to construct stormwater conveyance improvements to reduce the risks of flooding during high intensity storm events in the City's Factoria-Richards Creek drainage basin. The project proposes to replace an existing 3.3 feet x 5.3 feet stormwater conveyance pipe running along the east side Factoria Boulevard SE with a larger capacity stormwater conveyance pipe that flows into the inlet channel of Richards Creek adjacent to Factoria Village commercial area just south of I-90.

The City is currently completing preliminary design of the project and has initiated early outreach with State and Federal agencies, including the U.S. Army Corps of Engineers (USACE) [1], Washington Department of Fish and Wildlife (WDFW), and the Muckleshoot Indian Tribe (MIT). The purpose of the outreach has been to present the project and obtain preliminary feedback on the project and to determine likely permitting requirements.

Recent communications with the MIT and WDFW have centered on the classification of the existing stormwater outfall into the open channel at Factoria Village and the existing piped conveyance network upstream of the outfall. WDFW and the MIT have indicated that the head water of Richards Creek may have been up to SE 38th Street and that the historic fish habitat and stream channel have been impacted by urbanization of the area. Based on discussions with WDFW and MIT, the City is currently assuming that these entities view the replacement of the existing storm conveyance with a new storm conveyance as an impact to a piped historic stream channel and, therefore, requires mitigation that benefits fish access to habitat and/or improves quality of habitat. It is recognized that creating new open stream channel within the project area, which is heavily urbanized, is impractical, and that the mitigation efforts should focus on

[1] As of the date of this memorandum, the USACE has declined to participate in preliminary discussions. The USACE will engage when the project is formally presented through a permit application to the USACE.

WSP USA
Suite 300
33301 Ninth Avenue South
Federal Way, WA 98003-2600
+1 206-431-2300
wsp.com

restoring access to habitat or improving fish passage downstream of the project or in nearby stream basins. Daylighting of confined stream segments and removing man-made barriers/constrictions were particularly attractive mitigation approaches from the Tribe's point of view.

The purpose of this memorandum is to document the existing basin conditions and opportunities for mitigation within the Richards Creek basin to address project impacts. This memo summarizes characteristics and the current conditions of the upper Richards Creek basin as related to the possible opportunities to enhance aquatic habitat both and downstream of the outfall. This conceptual mitigation plan found that enhancement of aquatic habitat in the segment downstream of the outfall is the most feasible and practicable mitigation instrument available.

Once finalized, this memo will be used to prepare a formal mitigation plan for regulatory agency review and approval.

The proposed project is an outfall replacement and has been evaluated in terms of the current WDFW requirements for permitting outfalls under the Hydraulic Code regulations. These regulations require fish exclusion techniques to be placed on stormwater outfalls to prevent fish from entering piped systems. The project impacts (permanent and temporary) from replacing the outfall will require mitigation. Additionally, installation of fish exclusion where it currently does not exist creates a loss of access and has been considered in the mitigation concept.

This memo is organized into the following sections:

- Project Description
- Richards Creek Basin Analysis
- Project Impact Analysis
- Conceptual Mitigation Plan

PROJECT DESCRIPTION

The purpose of this project is to construct improvements to alleviate recurrent flooding issues occurring along Factoria Boulevard SE in south Bellevue associated with high-intensity rainfall events. The project goal is to minimize risk of street flooding and road closures within this area during high intensity storm events. From an alternative analysis completed in 2018, it was determined that existing storm conveyance along Factoria Boulevard is under capacity to convey storm water runoff during high intensity storm events, and it needs to be upsized between SE 36th Street and SE 38th Street.

The proposed project includes storm drain improvements, replacement and addition of storm inlets, and replacement of the existing outfall. Attachment C includes a map of the project area and selected sheets of the preliminary design plans to give an overview of the project and accompany the discussion of the project descriptions. A brief description of each project element is described below:

Storm Conveyance Replacement

The stormwater conveyance along the north bound lanes of Factoria Boulevard SE is currently a 3.3-foot by 5.3-foot pipe arch storm drain (in front of Factoria Village) and 30" diameter storm drain (in front of a Brown Bear car wash); the total replacement will be 642 feet. The first 413 feet of the replacement will be with a 9-foot-wide by 4-foot-high box storm drain from the outfall southward. The remaining 229 feet of conveyance line will be replaced with 5-foot-wide by 2-foot-high box storm drain.

Lateral Improvements

The project also proposes improvements to two storm drain crossings that run perpendicular across Factoria Boulevard SE. The proposed lateral near Formula-1 Fast Lube will consist of five new 18-inch pipes and the lateral to the south near the 7-11 store will add two new 18-inch pipes or a single 24-inch pipe in addition to the existing 24-inch and 36-inch pipes currently located at this lateral.

Inlet Improvements

The project is proposing 15 new inlets and 8 improvements to existing inlets along Factoria Boulevard SE. Many of the new structures will be combination inlets with both curb openings and flat vaned grates in the gutter. Those inlets occurring above the new conveyance line will not have sumps as the runoff will drop directly into the underlying storm conveyance.

Outfall Replacement

The existing storm drain conveys storm water runoff to a 5.3-foot by 3.3-foot pipe arch outfall that is currently semi-submerged and extends into Richards Creek near Factoria Village. The proposed outfall will consist of two 60-inch pipes located at the ordinary high-water mark (OHWM) and two 24-inch overflow pipes above the OHWM. A cobbled rock splash pad/transition zone and wing walls are proposed to reduce scour and erosive potential during high flows. The proposed outfall is designed for fish exclusion. The fish exclusion mechanism proposed is through check valves placed on each of the 60-inch pipes. The 24-inch overflows are approximately two feet above the OHWM and are currently designed without a fish exclusion mechanism.

RICHARDS CREEK BASIN

The 1,380-acre Richards Creek watershed is located entirely within the city of Bellevue, Washington. Richards Creek flows into Kelsey Creek, which shortly becomes Mercer Slough and flows into Lake Washington. There are two tributaries that flow into Richards Creek, East Creek located to the northeast of Factoria Boulevard and Sunset Creek, also located to the northeast of the project area. Much like Richards Creek, both tributaries are fed by stormwater runoff from impervious surface and are primarily stormwater conveyance pipes. The creek's headwater begins in the open channel adjacent to Factoria Village and is largely fed by impervious surface runoff from approximately 283-acre area south of I-90.

For the purpose of this memo, the Richards Creek Basin described below includes the area south of the Interstate 90 (I-90) culverts. This was done as the project limits, including mitigation, will be from the upstream end of the I-90 culverts south down Factoria Boulevard. The existing and historical context of that section of the upper Richards Creek basin is described below.

Existing Conditions

Richards Creek's basin is mostly located in a highly urbanized environment and its riparian buffers are nonexistent for a majority of its length. Urban runoff captured by approximately 17.7 miles of storm drain systems that convey surface runoff to the outfall at Richards Creek adjacent to Factoria Boulevard at Factoria Village, which is currently considered the headwater for Richards Creek. Approximately 5-miles of the17-mile pipe conveyance system is owned and maintained by the City under the MS4 permit. The remaining 12-miles are private stormwater conveyances that drain privately owned commercial businesses and their associated parking areas. Within the project area along Factoria Boulevard there is over 90% impervious surface that is owned by the aforementioned private commercial businesses.

The Richards Creek channel extends from the inlet to the I-90 culverts upstream approximately 320 feet south to the outfall associated with the proposed project. The rest of the drainage network in the upper basin is composed of the City's stormwater conveyance system and private drainage features. Approximately 94 percent of the drainage network is contained within the existing stormwater conveyance (piped) system (Attachment B, Figure 1). There are three segments that are currently not piped. These segments total approximately 490 linear feet (LF) of the 7,629 LF of the upper basin studied. These segments include approximately 320 LF open channel of Richards Creek, and 170 LF from two roadside ditches at Southeast 42nd Street. These ditches convey flows from Newport High School into the piped conveyances near Factoria Mall. An analysis of the basin conditions draining to the outfall was also reviewed and is summarized (Attachment B, Figure 2). Figures 1 and 2 below show pictures of the channel taken in 2019.

Figure 1: View of Existing Outfall and Riparian Conditions Looking South.

Figure 2: Existing Conditions in Richards Creek looking north through the channel.

Historic Conditions

A review of historic aerial photos and topographic maps help determining the potential historic extent of Richards Creek along the present day Factoria Boulevard. The 1950 USGS topographic map indicates a stream channel terminating near the intersection of the present day Factoria Boulevard and Southeast 38th Street (Attachment B, Figure 3).

PROJECT IMPACTS

Hydraulic Impacts:

The proposed improvements are sized to accommodate 100-year 24-hour storm event. As part of the project, existing and proposed storm system was simulated for a 100-year storm event in a hydraulic/hydrologic model to determine impacts in terms of peak flow rates and velocities. The results from this modeling at both the Factoria Village outfall and the outfall of the I-90 culverts are shown below in Table 1.

Table 1. 100-Year 24-hr Storm Event Modeling Results

Location	Existing Flowrate (CFS)	Proposed Flowrate (CFS)	Percent Increase	Existing Water Velocity (ft/s)	Proposed Water Velocity (ft/s)	Percent Increase
Outfall at Inlet Channel (Factoria Village)	126.4	134.3	**6%**	4.55	4.60	**1%**
Downstream of I-90 Culverts	151.0	155.8	**3%**	1.90	1.96	**3%**

The impacts of the proposed improvements during design 100-year storm would be minimal, as the peak flow rates would increase 6 and 3 percent at the Factoria Village stormwater outfall and the I-90 culverts, respectively. The increase in velocity at both locations are similarly minimal at 1 and 3 percent, respectively. There is a potential for increased erosion and subsequent degradation of the habitat downstream (north) of the I-90 culverts, however, the small increases in flow and velocity are not expected to measurably impact channel configurations and distribution of aquatic habitat (pool riffle complex). A minimization measure will be employed at the Factoria Village outfall that reduces the erosion potential, this was achieved by the addition of a splash pad and wingwalls that will act as an energy dissipator and bank stabilizer respectively.

Construction Impacts:

The direct impacts from the major elements of the project are summarized below and include the impacts associated from the proposed outfall replacement and the loss of access from the fish exclusion measures associated with the proposed design of the new outfall. The proposed project does not preclude future stream restoration in this location. Any future restoration would be initiated by a third party and require coordination with multiple commercial landowners from Factoria Village to the Brown Bear Car Wash property.

Outfall Replacement

During the outfall replacement, work will be conducted below the OHWM to install new 60-inch pipes and associated wingwalls. This will result in approximately 60 square feet of permanent impact to the open channel of Richards Creek and approximately 435 square feet of permanent impact to the stream buffer. Temporary construction limits will have an approximate impact to 10 square feet to the channel and 575 square feet to the riparian buffer. The fish exclusion devices would be installed for the 60-inch outfall pipes and preclude fish access into the conveyance system.

Storm Conveyance Replacement and Other Improvements

The approximate 645 feet of storm conveyance will be replaced within road right-of-way (ROW) along Factoria Blvd and does not directly impact any natural stream habitat.

The lateral improvements and new inlets will be constructed within road ROW along Factoria Boulevard SE from the 3600 block through the 3700 block. These improvements are designed to convey stormwater runoff from surface streets into the municipal conveyance system and minimize localized flooding on surface streets. No impacts are expected to occur from inlet construction.

MITIGATION ANALYSIS

Mitigation Sequencing

All projects need to consider avoidance and minimization of impacts to aquatic resources under federal, state, and local regulations. Impacts that remain unavoidable must then be compensated through mitigation. Federal regulations follow guidance provided by the USACE for issuance of a Clean Water Act permit. The Washington DFW administers the hydraulic code requirements through issuance of a hydraulic project approval. The City allows for the "Repair and maintenance of utility facilities, utility systems, stormwater facilities, and essential public facilities" within a critical area and its buffer under Land Use Code (LUC) 20.25H.055. The City requires mitigation sequence for these activities is referenced within LUC 20.25H.215. The follows section describes the measures that have been incorporated into the project design to comply with avoidance and minimization of project impacts.

Complete avoidance of aquatic resource impacts is infeasible with this project as the replacement outfall will be constructed below the OHWM of Richards Creek.

The project minimized the unavoidable impacts to Richards Creek and its riparian buffer by determining the smallest construction footprint necessary to replace the outfall.

The unavoidable impacts requiring compensatory mitigation are associated with the outfall replacements temporary construction impacts, permanent impacts from the new outfall, wingwalls and splash pad and the loss of access from required fish exclusion. These impacts are unavoidable as previously identified due to the existing undersized outfall being located below OHWM and WDFW stormwater outfalls requirements for fish exclusion measures.

Mitigation Framework

Compensatory mitigation is required to offset the unavoidable losses resulting from project activities in Richards Creek described above. These activities are regulated, authorized, and permitted by various government entities described in the previous section. Each of these agencies follows a no net loss of values and functions of existing aquatic resources. Their preferred alternative for mitigation does differ and is discussed below.

Federal and State agencies acceptable mitigation approaches are as follows (in order of preference).

1. **Mitigation banks and in-lieu fee programs.** These mitigation approaches are preferred because they consolidate resources and involve more financial planning and scientific expertise, reducing the risk of failed mitigation projects.

2. **Permittee-responsible mitigation.** Under this approach the permittee performs the mitigation and is responsible for its implementation and success through monitoring activities. Mitigation sites can be located on site or off site within the same watershed.

The City of Bellevue outlines their preferences for mitigation activities related to stream and stream critical area buffers in their Land Use Code (LUC) 20.25H.085. Their preferred mitigation approach is as follows.

1. On site, through replacement of lost critical area or buffer
2. On site, through enhancement of the functions and values of remaining critical area or buffer
3. Off site, through replacement or enhancement in the same subdrainage basin
4. Off site, through replacement or enhancement out of the subdrainage basin but in the same drainage basin

The proposed project took into consideration the mitigation approaches described above by determining the feasibility of each method for mitigating project impacts. There are no mitigation banks with a service area that covers the project area deeming this approach not applicable. The King County Mitigation Preserves is an approved in-lieu fee program that covers projects within King County. The King County program does not have any current receiving sites within the same watershed as the project. For this reason, it is not considered to be a suitable approach for project mitigation.

The remaining method for mitigating project impacts is the permittee-responsible approach. This strategy also follows City preference as dictated by the previously cited code that mitigation should start with on-site opportunities. If on-site mitigation does not adequately compensate for project impacts, the City will consider potential off-site mitigation opportunities to fully mitigate the impacts.

CONCEPTUAL MITIGATION PLAN

The City is proposing to mitigate for project impacts described previously by constructing on-site channel and riparian enhancements within and adjacent to Richards Creek. This approach has been selected to compensate for permanent impacts associated with the outfall structure footprint, temporary impacts associated with the construction activities, and the loss of access from the required fish exclusion mechanism. The proposed mitigation consists of stream and riparian enhancements to approximately 320 LF of Richards Creek and approximately 22,700 square feet of riparian buffer. Construction of the channel and riparian enhancements will occur

during the subsequent construction season due to limitations from the in-water work window and redundant impacts to Richards Creek.

Overall, the proposed enhancements for the Richards Creek channel aim to increase the available habitat for salmonid and steelhead species known to occur downstream of the I-90 culverts. The current lack of structural diversity and riparian vegetation communities will be enhanced into a well-shaded, structurally diverse community. The streambed will be widened and amended to a cobbled bed with medium and large woody debris on the banks in contact with water, to increase the complexity and diversity of the stream and restore natural stream conditions within this section of Richards Creek. New pool habitat will be created to provide low velocity resting habitat where it was previously not present in Richards Creek.

Existing Stream Conditions

The 320-LF section of Richards Creek is currently a channelized ditch that lacks meanders, riffles, pools, and downed woody debris. There is siltation throughout the channel, and it lacks typical streambed substrate that is used by spawning salmonids.

The riparian buffer consists almost exclusively of invasive Himalayan Blackberry (*Rubus armenicus*), lacking diversity and a native riparian vegetation community. In part, this is due to the buffer being constrained by Factoria Boulevard to the west, the outfall to the south, the parking lot and commercial buildings to the east, and the existing I-90 culverts to the north. Overall, the channel is a degraded environment for fish habitat. Exhibits of the existing conditions are shown in Figures 1 and 2 of this document.

Proposed Stream Enhancements

- Streambed and Floodplain:

  The existing channel will be excavated to create an average of 10-foot-wide, meandering stream. Approximately 3,200 square feet of streambed will be enhanced through the addition a 1-foot thick layer of well graded 6-inch rounded cobble fill laid into the streambed with a streambed sediment mix to increase the available habitat for spawning and aquatic macroinvertebrates. The widening and meandering of the stream will slow flows and decrease the erosive potential within the channel. The proposed stream enhancements are shown in Attachment A.

- Stream Habitat and Floodplain Bench:

  The banks of the stream will have medium and large woody debris (up to 18 inches DBH) with some root wads anchored on the banks and channel edge; this is done to help impound water and creates pooling areas with plunges. They also provide excellent cover for fish, stabilize the banks, create flow complexity, and reduce the erosive potential of the stream.

  A floodplain bench will be created between the 2- and 100-year water surface elevation and will be planted with native riparian vegetation consisting of red twig dogwood (*Cornus*

Sericea), yellow twig dogwood (*Cornus sericea flaviremea*), Pacific willow (*Salix lucida*), and Pacific ninebark (*Pysocarpus capitatus*). Increased shading and structure of the stream channel will encourage aquatic macroinvertabrates to populate this segment of stream. The preliminary drawings attached as Attachment A contains an exhibit of the proposed enhancements.

- Riparian Buffer:

  The upland area consisting of the existing riparian buffer will be cleared of Himalayan blackberry and revegetated with native shrubs and trees. The vegetation will consist of red flowering currant (*Ribes sanguineum*), nootka rose (*Rosa nutkana*), Scouler's willow (*Salix scouleriana*), snowberry (*Symphoricarpos albus*), and Sitka spruce (*Picea sitchensis*). These plant additions will increase the vegetation diversity, increase the shading of the enhanced stream channel, and provide the opportunity for recruitment of woody debris into the channel.

Proposed Monitoring

A monitoring plan for both the stream channel and riparian enhancement will be conducted for five years after construction. This will follow the City's LUC 20.25H.220 and will involve three to five years of active monitoring and a passive long-term management plan. The key components of the monitoring will be tied to performance standards that will follow City guidelines and be flushed out in the final mitigation plan. A few examples of performance criteria include the following. A complete monitoring plan will be provided in the final mitigation plan.

- Plant survival
- High percentage of native plant cover
- Low percentage of non-native species cover
- Stream bank stabilization
- Documented fish usage
- Observations of aquatic macroinvertebrates

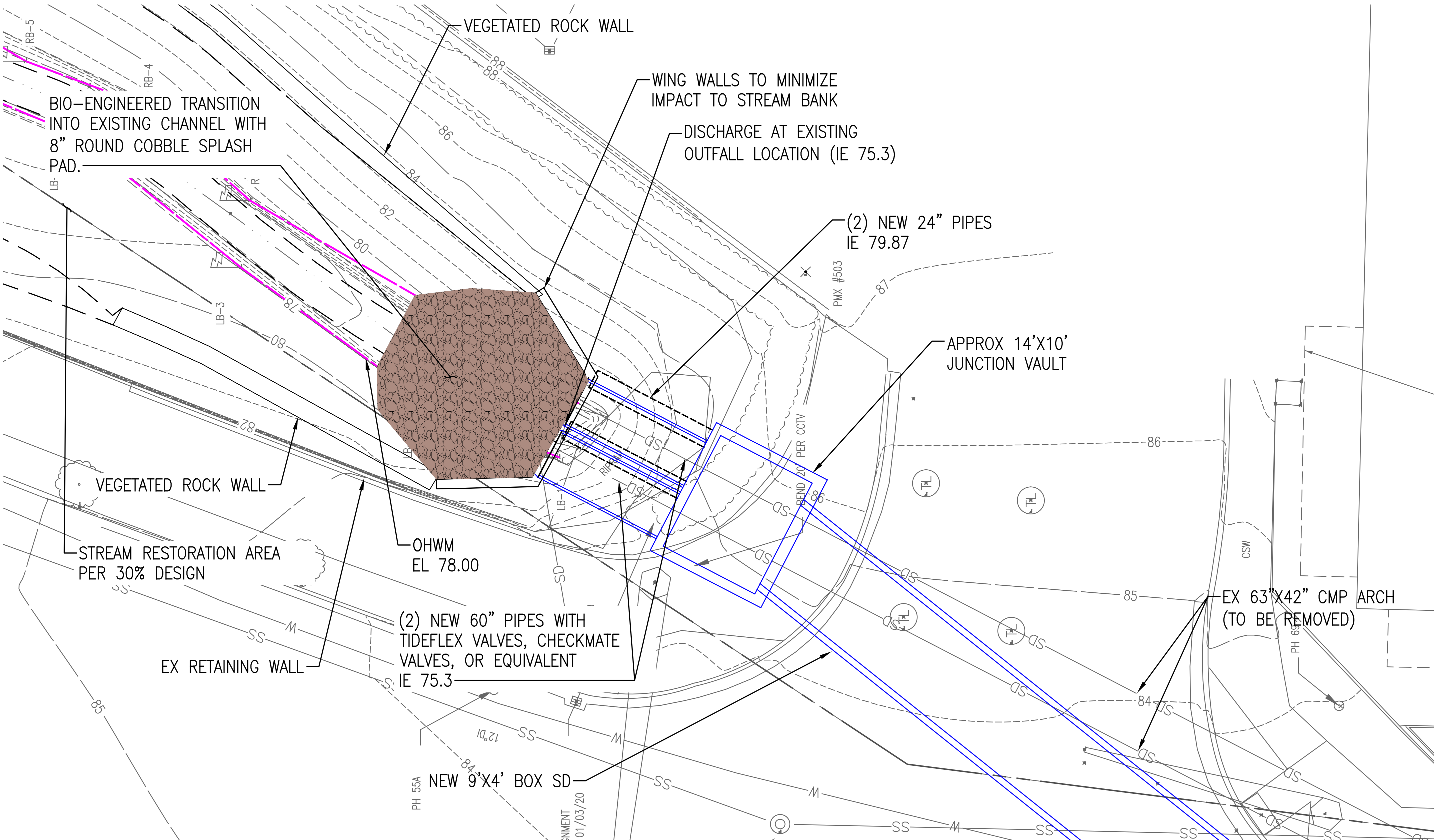
List of Attachments:
Attachment A – Proposed Channel Mitigation Plan – Plan, Section and Details
Attachment B – List of Figures
Attachment C – Select Sheets of Preliminary Design Drawings

DR:BS:JC
March 25, 2020

ATTACHMENT A

PROPOSED CHANNEL MITIGATION PLAN – PLAN, SECTION AND DETAILS

WSP USA
Suite 300
33301 Ninth Avenue South
Federal Way, WA 98003-2600
+1 206-431-2300
wsp.com



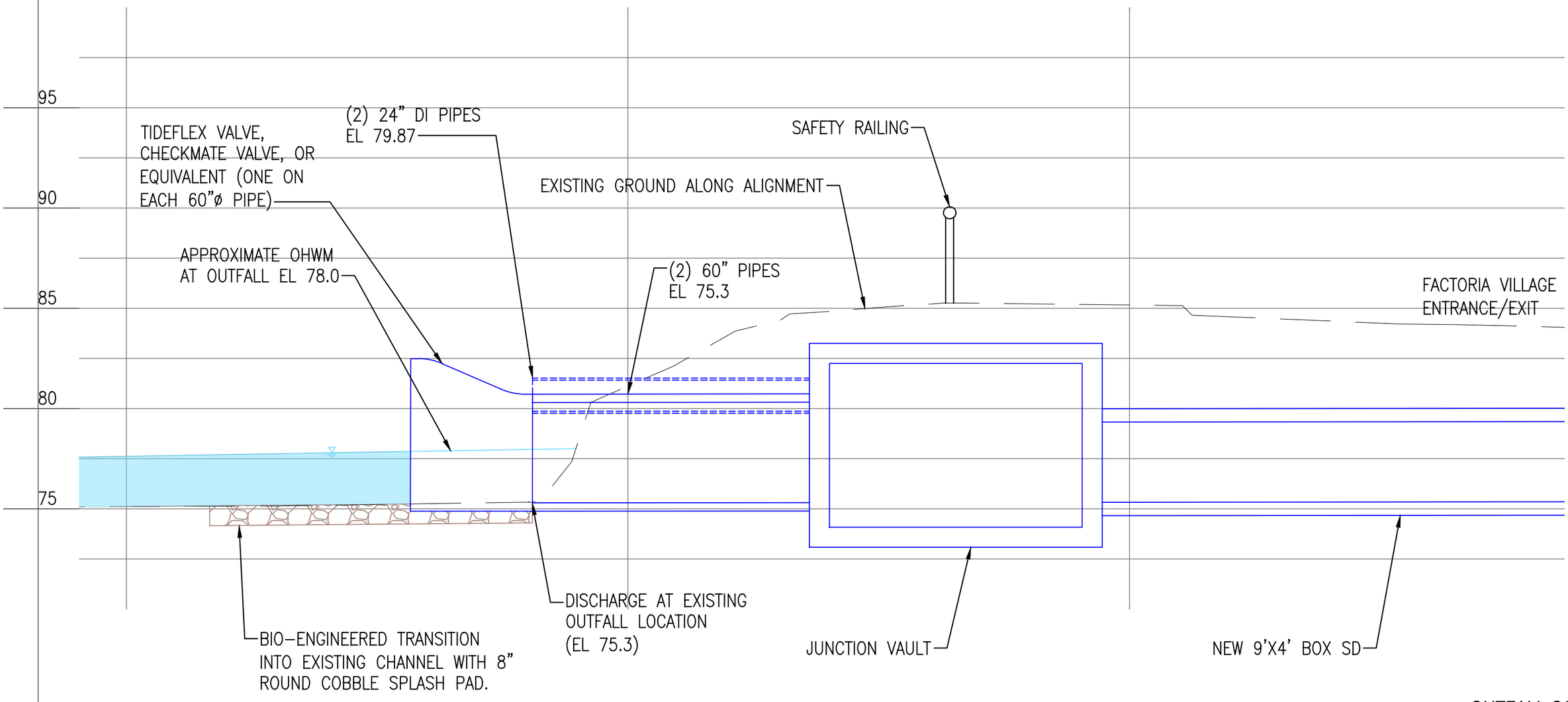
PLAN

OUTFALL REPLACEMENT CONCEPT
SCALE: 1" = 10'

1"=10' Scale 10 5 0 10 20 Feet

OUTFALL CONCEPT PLAN

FACTORIA BLVD CONVEYANCE IMPROVEMENTS
BELLEVUE, WA



PROFILE

OUTFALL REPLACEMENT CONCEPT
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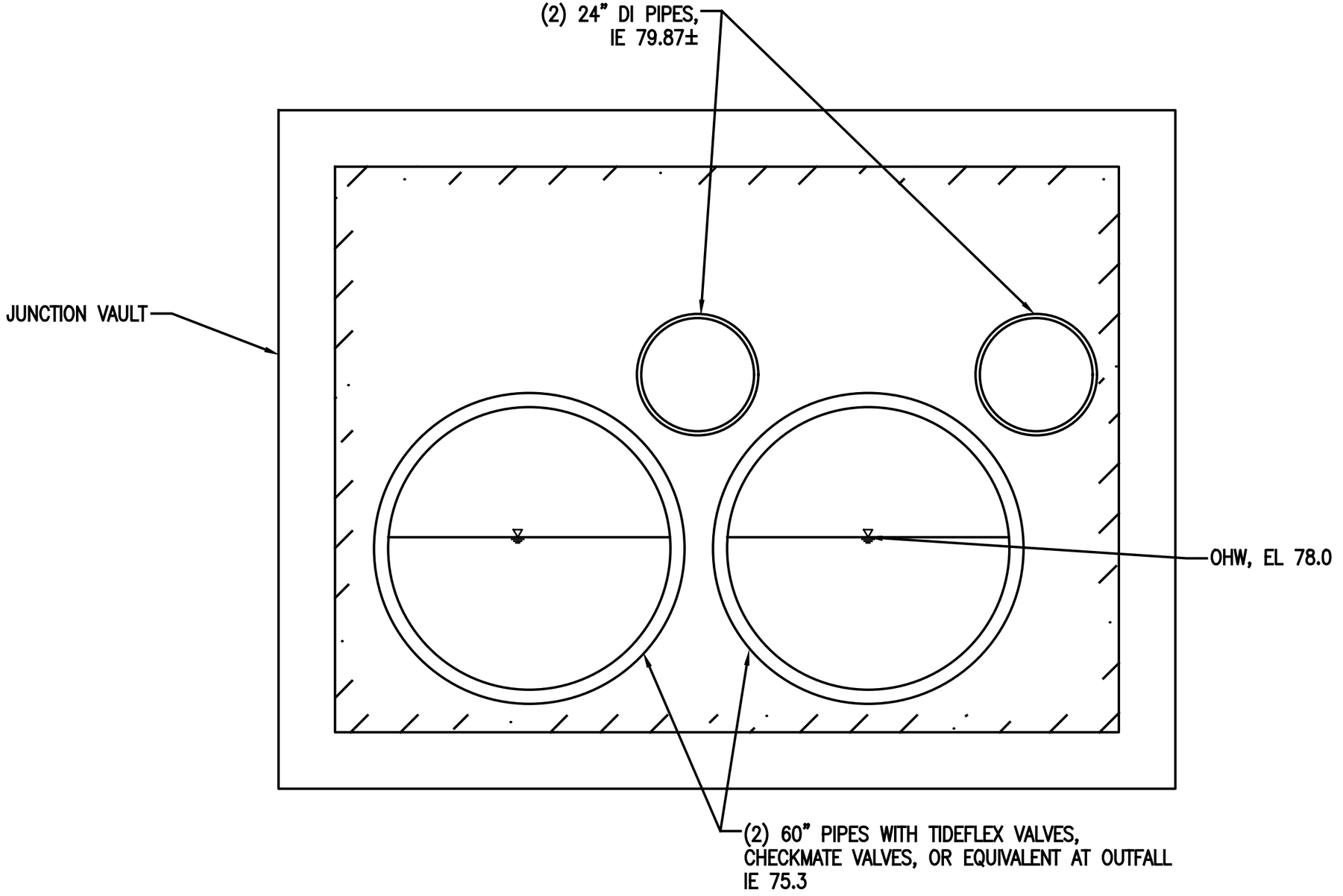
Scale Feet

OUTFALL CONCEPT
PROFILE

FACTORIA BLVD CONVEYANCE IMPROVEMENTS
BELLEVUE, WA



SECTION

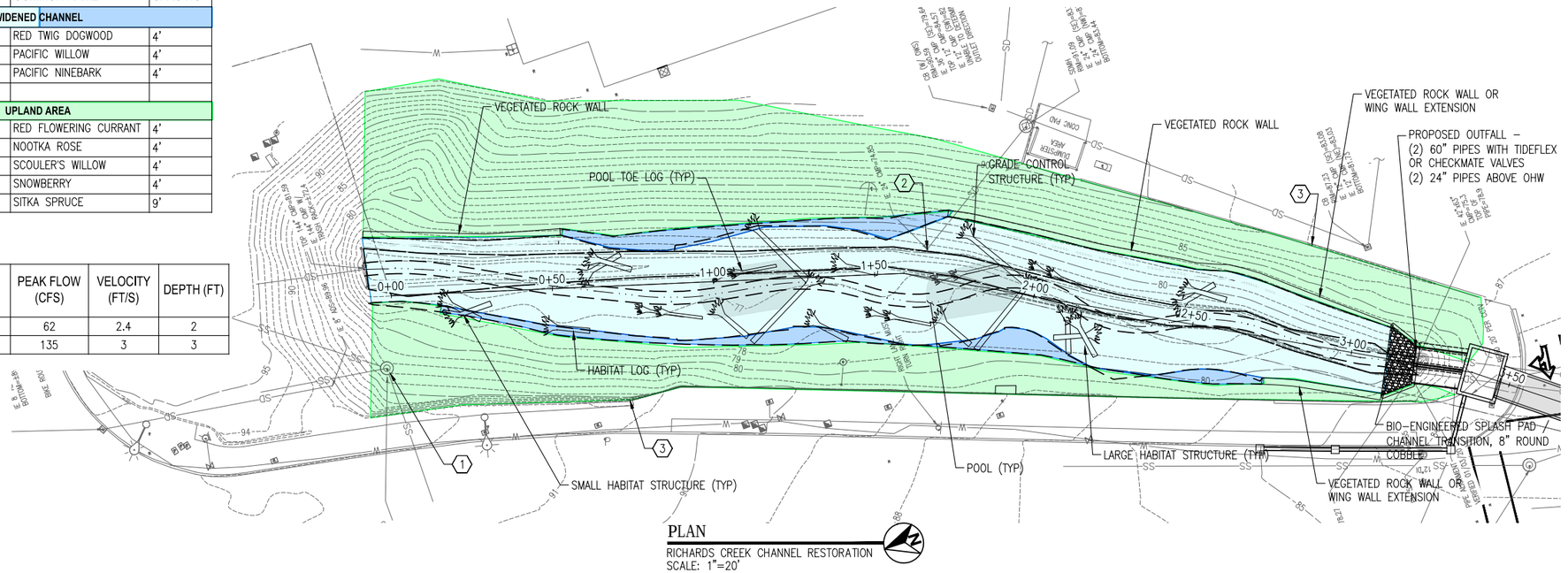
OUTFALL REPLACEMENT CONCEPT
SCALE: 1" = 2'

OUTFALL CONCEPT
SECTION

FACTORIA BLVD CONVEYANCE IMPROVEMENTS
BELLEVUE, WA

BOTANICAL NAME	COMMON NAME	SPACING
WIDENED CHANNEL		
CORNUS SERICEA	RED TWIG DOGWOOD	4'
SALIX LUCIDA	PACIFIC WILLOW	4'
PYSOCARPUS CAPITATUS	PACIFIC NINEBARK	4'
UPLAND AREA		
RIBES SANGUINEUM	RED FLOWERING CURRANT	4'
ROSA NUTKANA	NOOTKA ROSE	4'
SALIX SCOULERIANA	SCOULER'S WILLOW	4'
SYMPHORICARPOS ALBUS	SNOWBERRY	4'
PICEA SITCHENSIS	SITKA SPRUCE	9'

STORM FREQUENCY	PEAK FLOW (CFS)	VELOCITY (FT/S)	DEPTH (FT)
2-YEAR	62	2.4	2
100-YEAR	135	3	3



PLAN
RICHARDS CREEK CHANNEL RESTORATION
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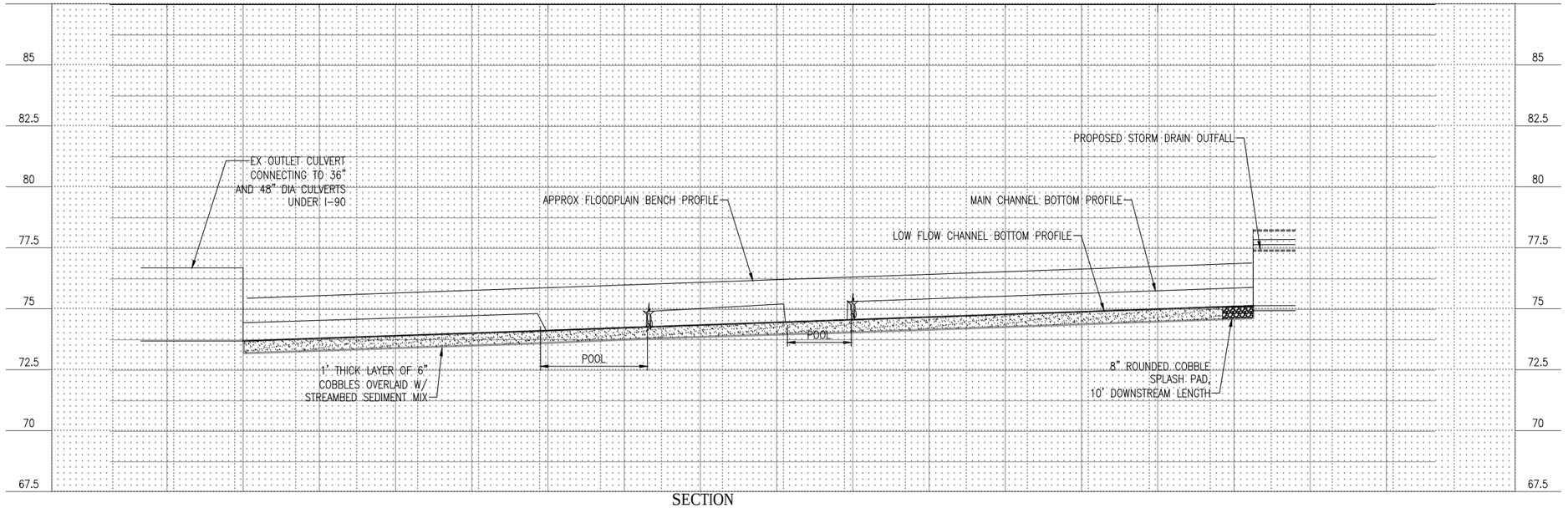


SECTION
RICHARDS CREEK CHANNEL RESTORATION
HORIZ SCALE: 1"=20'
VERT SCALE: 1"=5'

GENERAL NOTES

1. EXISTING EAST BANK OF RICHARDS CREEK INCLUDES SIGNIFICANT ROCK. CONTRACTOR TO AVOID DISTURBING EAST BANK. ANY DISTURBANCE SHALL BE APPROVED BY ENGINEER.

CONSTRUCTION NOTES

1. PROTECT EXISTING SANITARY MANHOLE.
2. PROTECT EXISTING STORM DRAIN OUTFALL.
3. PROPOSED WORK ACCESS LOCATION.

1"=20' Scale: 20 10 0 20 40 Feet

1"=5' Scale: 5 2.5 0 5 10 Feet

CALL 72 HOURS BEFORE YOU DIG 1-800-424-5555

NO	DATE	BY	APPR	REVISIONS
1	03/03/20	JTE	JC	30% DESIGN – NOT FOR CONSTRUCTION

Louis Berger
520 Pike St, Ste 1005, Seattle, WA 98101 · 206.453.1043

30% SUBMITTAL

Approved By

DESIGN MANAGER DATE

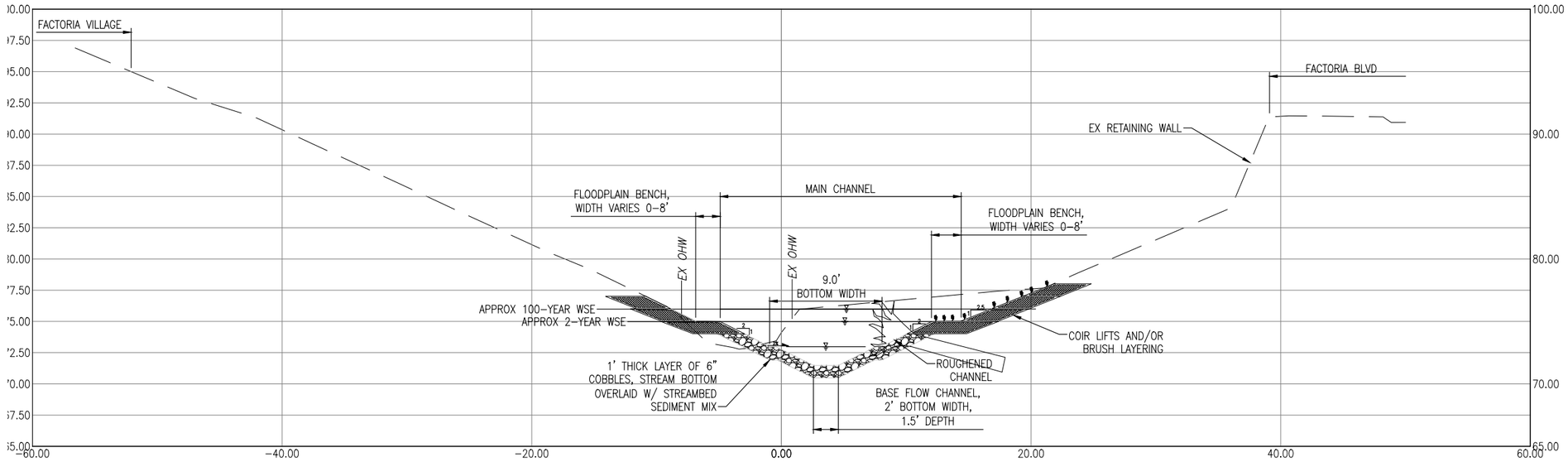
PROJECT MANAGER DATE

JAY CAMMERMEYER	03/03/20
DESIGNED BY	DATE
JAMES ELLIS	03/03/20
DRAWN BY	DATE
MIKE GISEBURT	03/03/20
CHECKED BY	DATE

City of Bellevue
UTILITIES

CHANNEL MITIGATION-- CONCEPTUAL PLAN AND PROFILE

Ellis, James – 3/3/2020 2:45 PM – C:\Users\JEllis\Desktop\30% Submittal\16 ST9 RICHARDS CREEK PLAN AND PROFILE.dwg



SECTION

RICHARDS CREEK TYPICAL CHANNEL SECTION
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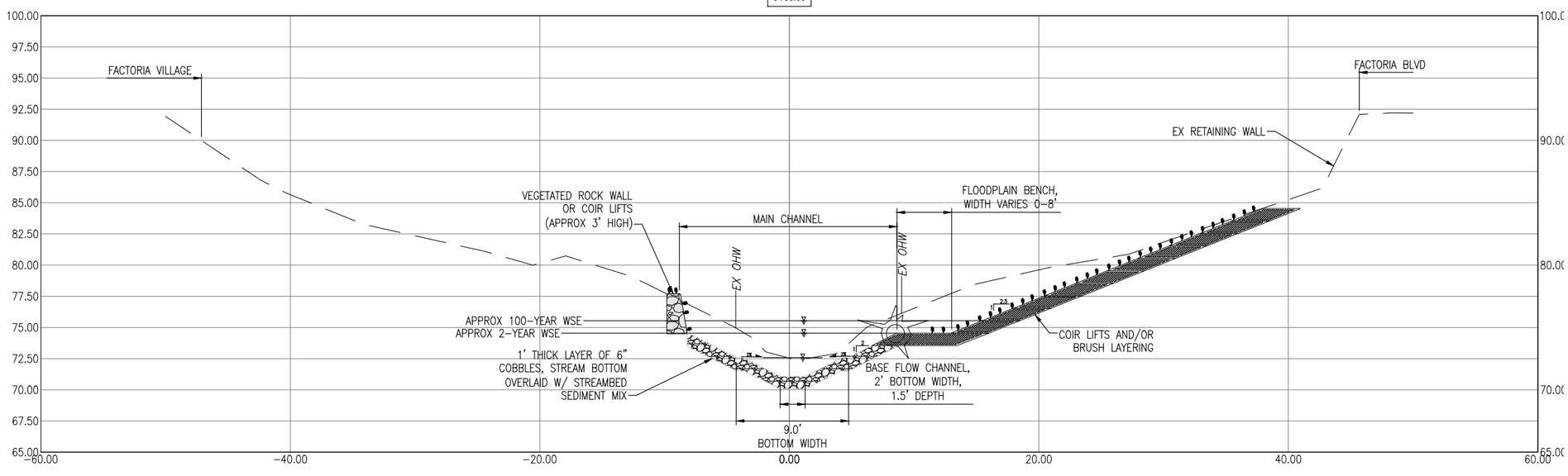


SECTION

RICHARDS CREEK TYPICAL CHANNEL SECTION
WITH VEGETATED ROCK WALL
SCALE: 1"=5'

GENERAL NOTES

1. –

CONSTRUCTION NOTES

1 –

1"=5' Scale 5 2.5 0 5 10 Feet

CALL 72 HOURS BEFORE YOU DIG 1-800-424-5555

NO	DATE	BY	APPR	REVISIONS
1	03/03/20	JTE	JC	30% DESIGN – NOT FOR CONSTRUCTION

Louis Berger
520 Pike St, Ste 1005, Seattle, WA 98101 · 206.453.1043

30% SUBMITTAL

Approved By

DESIGN MANAGER DATE

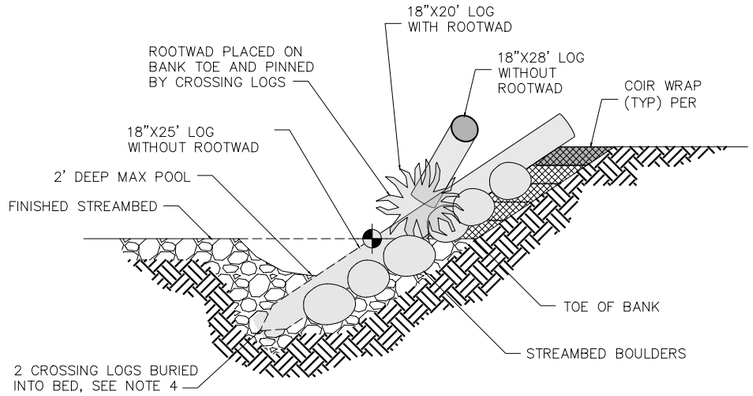
PROJECT MANAGER DATE

JAY CAMMERMEYER	03/03/20
DESIGNED BY	DATE
JAMES ELLIS	03/03/20
DRAWN BY	DATE
MIKE GISEBURT	03/03/20
CHECKED BY	DATE

City of Bellevue
UTILITIES

CHANNEL MITIGATION-- CONCEPTUAL CROSS-SECTIONS

Ellis, James – 3/3/2020 2:46 PM – C:\Users\JEllis\Desktop\30% Submittal\17 ST10 RICHARDS CREEK CROSS SECTIONS.dwg



SECTION

HABITAT LOG STRUCTURE
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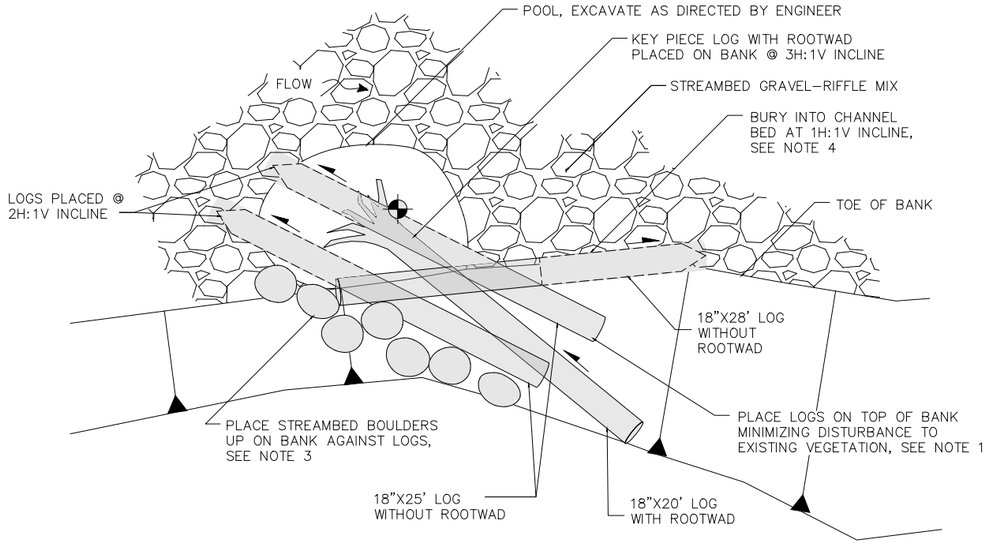


PLAN

HABITAT LOG STRUCTURE
SCALE: NTS

CALL 72 HOURS
BEFORE YOU DIG
1-800-424-5555

NO	DATE	BY	APPR	REVISIONS
1	12/13/19	JTE	JC	30% DESIGN – NOT FOR CONSTRUCTION

Louis Berger
520 Pike St, Ste 1005, Seattle, WA 98101 · 206.453.1043

30% SUBMITTAL

Approved By

DESIGN MANAGER DATE

PROJECT MANAGER DATE

JAY CAMMERMEYER	12/13/19
DESIGNED BY	DATE
JAMES ELLIS	12/13/19
DRAWN BY	DATE
MIKE GISEBURT	12/13/19
CHECKED BY	DATE

City of Bellevue
UTILITIES

CHANNEL MITIGATION--CONCEPTUAL WOODY DEBRIS DETAILS

Ellis, James – 3/3/2020 12:42 PM – C:\Users\JEllis\Desktop\30% Submittal\18 ST11 STORM INLET AND STRUCTURE DETAILS.dwg

ATTACHMENT B
LIST OF FIGURES

WSP USA
Suite 300
33301 Ninth Avenue South
Federal Way, WA 98003-2600
+1 206-431-2300
wsp.com

Figure 1: Project Area Map

Factoria Boulevard Stormwater Conveyance Improvements

0 50 100 200 300 400
Feet

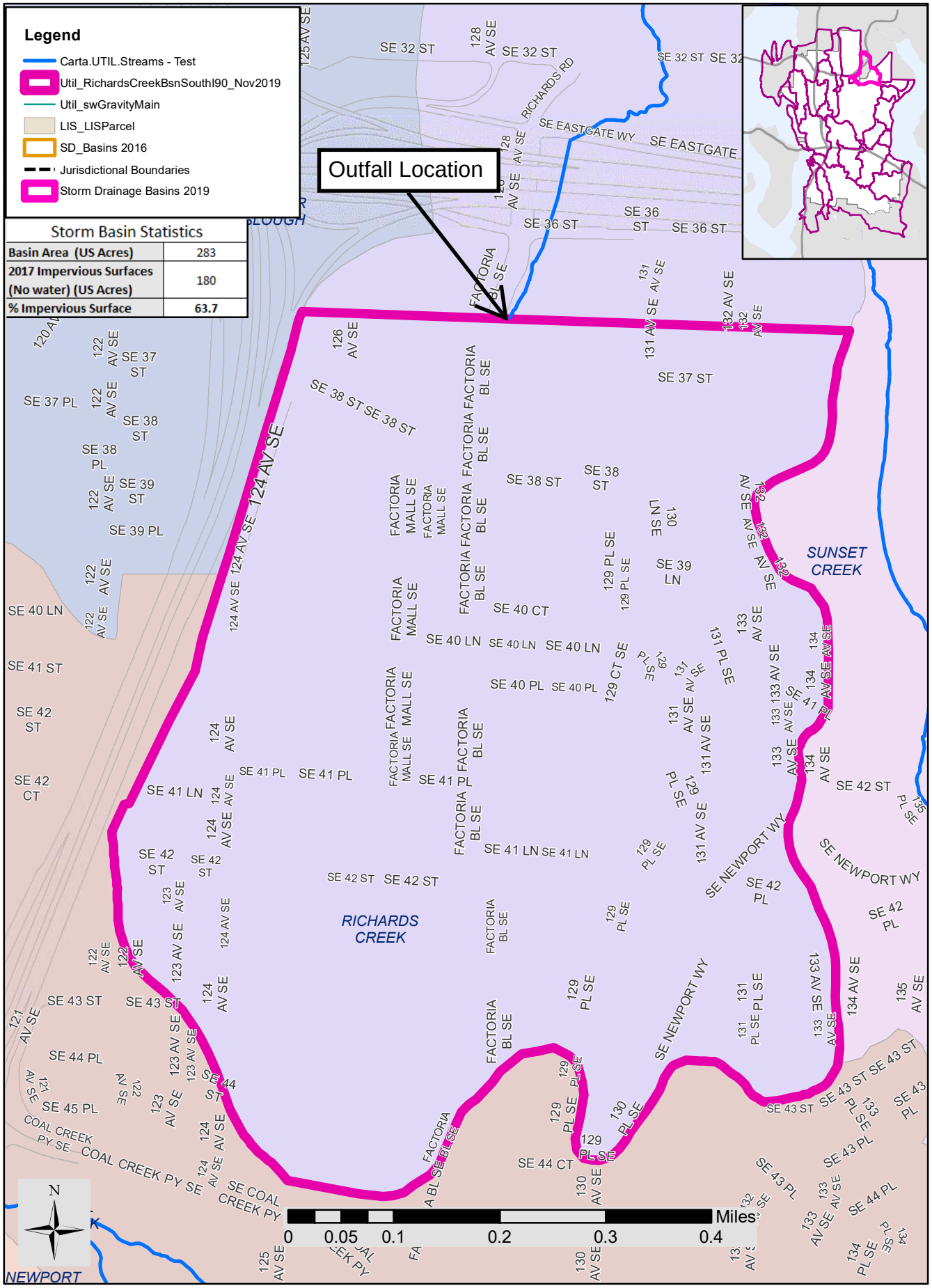
N

MARCH 2020

C:\Users\USBS682339\Desktop\Factoria\CMP Figures\Figure_1_Project_Area.mxd

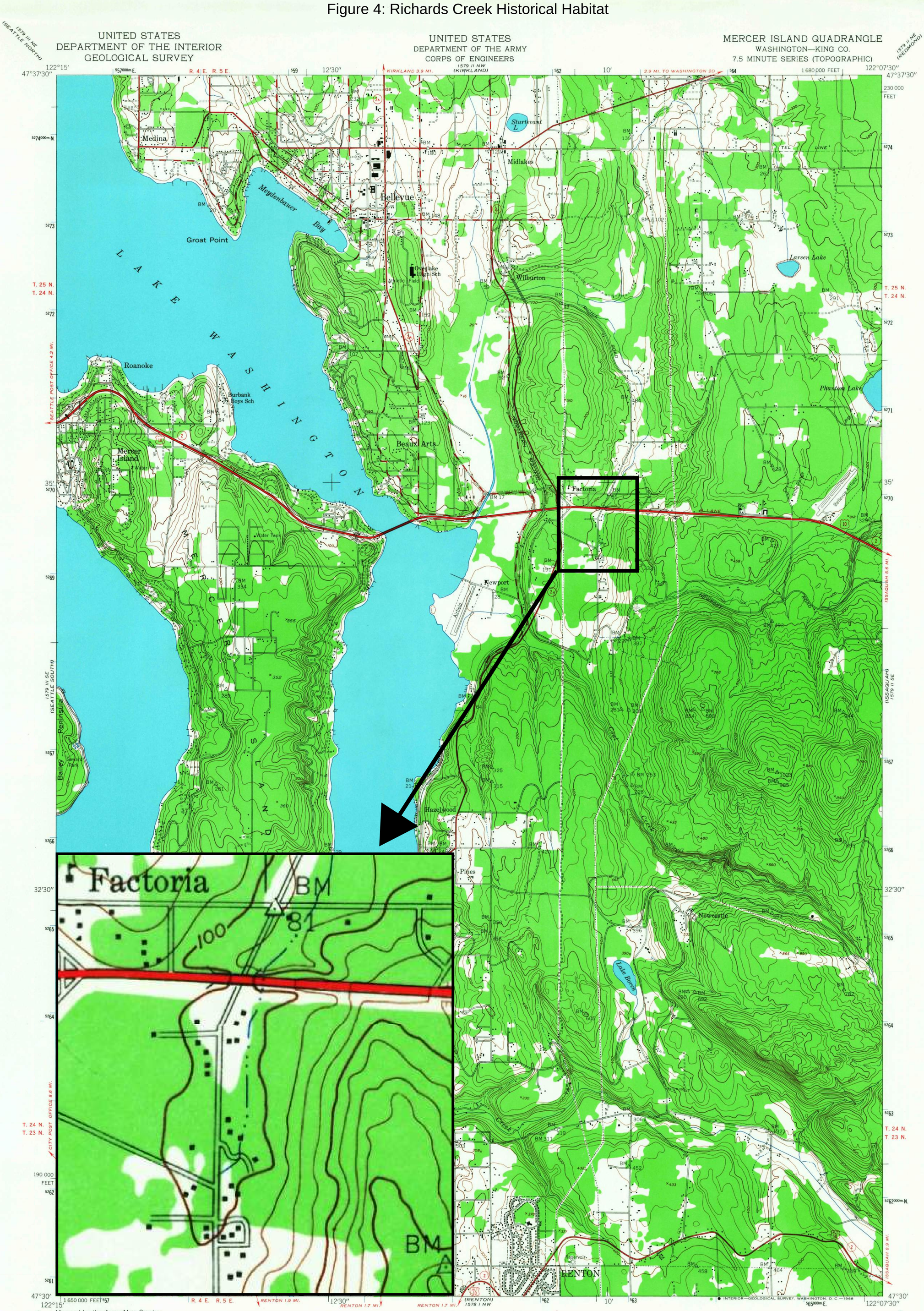
Figure 2: Richards Creek Existing Basin Conditions

Figure 3: Richards Creek Basin Conditions Draining to Outfall.



Date: 12/5/2019 Document Path: V:\Utilities\ArcGIS\Storm\BasinMaps\RichardsCreekSouthI90Stats\RichardCreekSouthI90Stats_Nov2019Working.mxd

Figure 4: Richards Creek Historical Habitat



ATTACHMENT C

PROJECT AREA AND SELECT SHEETS OF PRELIMINARY DESIGN DRAWINGS

WSP USA
Suite 300
33301 Ninth Avenue South
Federal Way, WA 98003-2600
+1 206-431-2300
wsp.com

GENERAL NOTES

1. A PUBLIC INFORMATION SIGN LISTING 24–HOUR EMERGENCY PHONE NUMBERS FOR THE CITY AND THE CONTRACTOR WILL BE PROVIDED TO THE CONTRACTOR. THE CONTRACTOR MUST POST THE SIGN AT THE PROJECT SITE IN FULL VIEW OF THE PUBLIC, AND IT MUST REMAIN POSTED UNTIL THE FINAL SIGN–OFF BY THE ENGINEER.

2. ALL LOCATIONS OF EXISTING UTILITIES HAVE BEEN OBTAINED FROM AVAILABLE RECORDS AND SHOULD, THEREFORE, BE CONSIDERED ONLY APPROXIMATE AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS AND TO DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN. ALL WORK ASSOCIATED WITH ADJUSTING DESIGN TO AVOID UTILITIES AND TEMPORARY PROTECTION AND SUPPORT OF UTILITIES WITHIN EXCAVATION SHALL BE INCIDENTAL TO OTHER ITEMS.

3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL LAWS. ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND DETAILS OF THE CITY OF BELLEVUE AS AMENDED BY THE PROJECT SPECIAL PROVISIONS OR CONTRACT DRAWINGS. SPECIFICATIONS AND DETAILS SHALL BE THE CITY OF BELLEVUE SPECIFICATIONS AND DETAILS IN EFFECT ON THE DATE OF APPROVAL OF THESE CONSTRUCTION DRAWINGS.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UNDERGROUND UTILITIES. CALL UNDERGROUND UTILITY LOCATE SERVICE AT TELEPHONE NUMBER 1–800–424–5555 A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO ANY EXCAVATION.

6. OVERHEAD ELECTRICAL POWER, TELEPHONE, CABLE TV, AND OTHER OVERHEAD LINES MAY NOT BE SHOWN. DETERMINE THE EXTENT OF HAZARDS OR IMPACTS ON CONSTRUCTION ACTIVITIES CREATED BY OVERHEAD OR UNDERGROUND ELECTRICAL POWER, TELEPHONE, CABLE TV, AND OTHER LINES IN ALL AREAS, AND FOLLOW PROCEDURES DURING CONSTRUCTION AS REQUIRED BY LAW AND REGULATIONS. TAKE WHATEVER PRECAUTIONS AND REMEDIAL MEASURES THAT MAY BE REQUIRED TO PROTECT PERSONS AND PROPERTY AND TO AVOID DISRUPTION OF SERVICE.

7. MATERIALS REQUIRED FOR FILL, BACKFILL, AND OTHER WORK WILL BE SECURED BY THE CONTRACTOR FROM A SITE MEETING ALL OF THE REQUIREMENTS IN SHOWN ON THESE PLANS AND LOCAL, STATE, AND FEDERAL REGULATIONS REQUIRED FOR HEALTH, SAFETY, AND THE PUBLIC WELFARE.

8. THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER THAT SHOWS HOW THE WORK SHALL BE ACCOMPLISHED WHILE MAINTAINING TRAFFIC AND PEDESTRIAN ACCESS PER PROJECT REQUIREMENTS AT ALL TIMES.

9. FLAGGERS, UNIFORMED OFFICERS, AND/OR TEMPORARY PORTABLE SIGNALIZED TRAFFIC LIGHTS SHALL BE USED TO CONTROL TRAFFIC THROUGH THE PROJECT SITE.

10. ANY WORK WITHIN THE RIGHT–OF–WAY THAT INVOLVES CROSSING STREETS OR IMPEDING THE FLOW OF TRAFFIC WILL REQUIRE 48 HOURS ADVANCE NOTIFICATION, EXCEPT IN THE EVENT OF AN EMERGENCY, TO ALL OF THE FOLLOWING:

FIRE DEPARTMENT:	425–452–6892
POLICE DEPARTMENT:	425–452–6917
DEVELOPMENT SERVICES, GENERAL:	425–452–6800
DEVELOPMENT SERVICES, CLEARING AND GRADING:	425–452–2019
KING COUNTY METRO (24–HR):	206–684–1705 OR 206–296–8100
BELLEVUE SCHOOL DISTRICT:	425–456–4000

LEGEND

SYMBOL	DESCRIPTION
EXISTING	
312604900	QUARTER CORNER
	TAX LOT / PARCEL NUMBER
	WHEEL CHAIR RAMP
	SIGN
	POLE
	TRAFFIC SIGNAL CABINET
	STREET LIGHT W/ ARM
	POST OR BOLLARD
	DECIDUOUS TREE
	CONIFEROUS TREE
W	WATER MANHOLE
WV	WATER VALVE
WM	WATER METER
	FIRE HYDRANT
S	SEWER MANHOLE
D	STORM DRAIN MANHOLE
D	STORM DRAIN VAULT
	STORM CATCH BASIN
	STORM CULVERT
E	ELECTRIC MANHOLE
E	ELECTRIC VAULT
T	TELEPHONE MANHOLE
TR	TELEPHONE RISER
GV	GAS VALVE
	CONSTRUCTION/CLEARING LIMITS
	GRADING LIMITS
	ROAD CENTERLINE
	STREAM FLOW LINE
	ORDINARY HIGH WATER MARK
	WETLAND BOUNDARY
	EDGE OF GRAVEL OR DIRT
	TRAFFIC STRIPING
	ROCKERY
x x x	FENCE LINE (TYPE AS NOTED)
	TREE/VEGETATION LINE
	EASEMENT LINE
	PROPERTY LINE
	QUARTER SECTION LINE
	EXISTING RIGHT–OF–WAY LINE
S	SANITARY SEWER
G	NATURAL OR PETROLEUM GAS
P	UNDERGROUND POWER
D	STORM DRAIN
T	UNDER GROUND TELEPHONE
W	DOMESTIC WATER
	WATTLE
	GEOTEXTILE (SECTION)
	TEMPORARY DIVERSION PIPE

ABBREVIATIONS

ø	DIAMETER	CSWPPP	CONTAMINATED STORMWATER POLLUTION PREVENTION PLAN	LF	LINEAR FOOT/FEET	S	SOUTH, SLOPE
AB	ANCHOR BOLT			MAX	MAXIMUM	SD	STORM DRAIN
AC	ACRE(S), ASBESTOS CONCRETE	CTR	CENTER	MH	MANHOLE	SE	SOUTHEAST
ACP	ASBESTOS CONCRETE PIPE	CY	CUBIC YARD(S)	MID	MIDPOINT, MIDDLE	SF	SQUARE FOOT/FEET
APPROX	APPROXIMATE	DECID	DECIDUOUS	MIN	MINIMUM	SHT	SHEET
AVE	AVENUE	DI	DUCTILE IRON	MISC	MISCELLANEOUS	SP	SPACING
AVG	AVERAGE	DIA, DIAM	DIAMETER	MON	MONUMENT	SPEC	SPECIFICATION
ASPH	ASPHALT	DIM	DIMENSION	N	NORTH, NORTHING	SS	SANITARY SEWER
BMP	BEST MANAGEMENT PRACTICE	DVD	DIGITAL VIDEO DISC	NAD	NORTH AMERICAN DATUM	SSMH	SANITARY SEWER MANHOLE
BOT	BOTTOM	DW	DRIVEWAY	NAVD	NORTH AMERICAN VERTICAL DATUM	SST	STAINLESS STEEL
CB	CATCH BASIN	DWG	DRAWING	NE	NORTHEAST	ST	STREET
CC	CENTER TO CENTER	E	EAST, EASTING	NO	NUMBER	STD	STANDARD
CCA	CHROMATED COPPER ARSENATE	EC	EROSION CONTROL	NTS	NOT TO SCALE	STA	STATION
CESCL	CONTRACTOR EROSION SEDIMENT CONTROL LEAD	EFP	EQUIVALENT FLUID PRESSURE	NW	NORTHWEST	STW	STEEL WELD PIPE
		EL, ELEV	ELEVATION	OC	ON CENTER	SW	SOUTHWEST
CFS	CUBIC FEET PER SECOND	EMB	EMBEDMENT	OD	OUTSIDE DIAMETER	T	TELECOMMUNICATIONS
CG	CURB AND GUTTER	EOP	EDGE OF PAVEMENT	OH	OVERHEAD POWER LINE	TBD	TO BE DETERMINED
CH, CHAN	CHANNEL	EX, EXIST	EXISTING	OHW	ORDINARY HIGH WATER	TEMP	TEMPORARY
CLF	CHAIN LINK FENCE	FT	FOOT, FEET	OHWM	ORDINARY HIGH WATER MARK	TESC	TEMPORARY EROSION AND SEDIMENT CONTROL
CLR	CLEAR, CLEARANCE	G	GAS	P	POWER		
℄	CENTERLINE	GERM	GERMINATION	PCCP	PORTLAND CEMENT CONCRETE PAVEMENT	TYP	TYPICAL
CMP	CORRUGATED METAL PIPE	GPS	GLOBAL POSITIONING SYSTEM			V, VERT	VERTICAL
COB	CITY OF BELLEVUE	GV	GAS VALVE	PCF	POUNDS PER CUBIC FOOT	VEG	VEGETATION
CONC	CONCRETE	GAL	GALLON(S)	PG	PEA GRAVEL	W	WEST, WATER, WIDE/WIDTH
CSBC	CRUSHED SURFACING BASE COURSE	H	HIGH	PSF	POUNDS PER SQUARE FOOT	W/	WITH
CSTC	CRUSHED SURFACING TOP COURSE	HMA	HOT MIX ASPHALT	PL	PLACE, PLATE	WAC	WASHINGTON ADMINISTRATIVE CODE
CSW	CONCRETE SIDEWALK	HORIZ	HORIZONTAL	PROP	PROPOSED	WM	WATER METER, WILLIAMETTE MERIDIAN
		ID	INNER DIAMETER	PP	POWER POLE	WSDOT	WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
		IE	INVERT ELEVATION	PVC	POLYVINYL CHLORIDE		
		IPS	IRON PIPE SIZE	R	RADIUS	WSEL	WATER SURFACE ELEVATION
		L	LENGTH	RD	ROAD	WV	WATER VALVE
		LB	POUND	RMJ	RESTRAINED MECHANICAL JOINT	YR	YEAR
				ROW	RIGHT OF WAY		

CALL 72 HOURS BEFORE YOU DIG 1-800-424-5555

NO	DATE	BY	APPR	REVISIONS
1	03/03/20	JTE	JC	30% DESIGN – NOT FOR CONSTRUCTION

Louis Berger
520 Pike St, Ste 1005, Seattle, WA 98101 · 206.453.1043

30% SUBMITTAL

Approved By

DESIGN MANAGER DATE

PROJECT MANAGER DATE

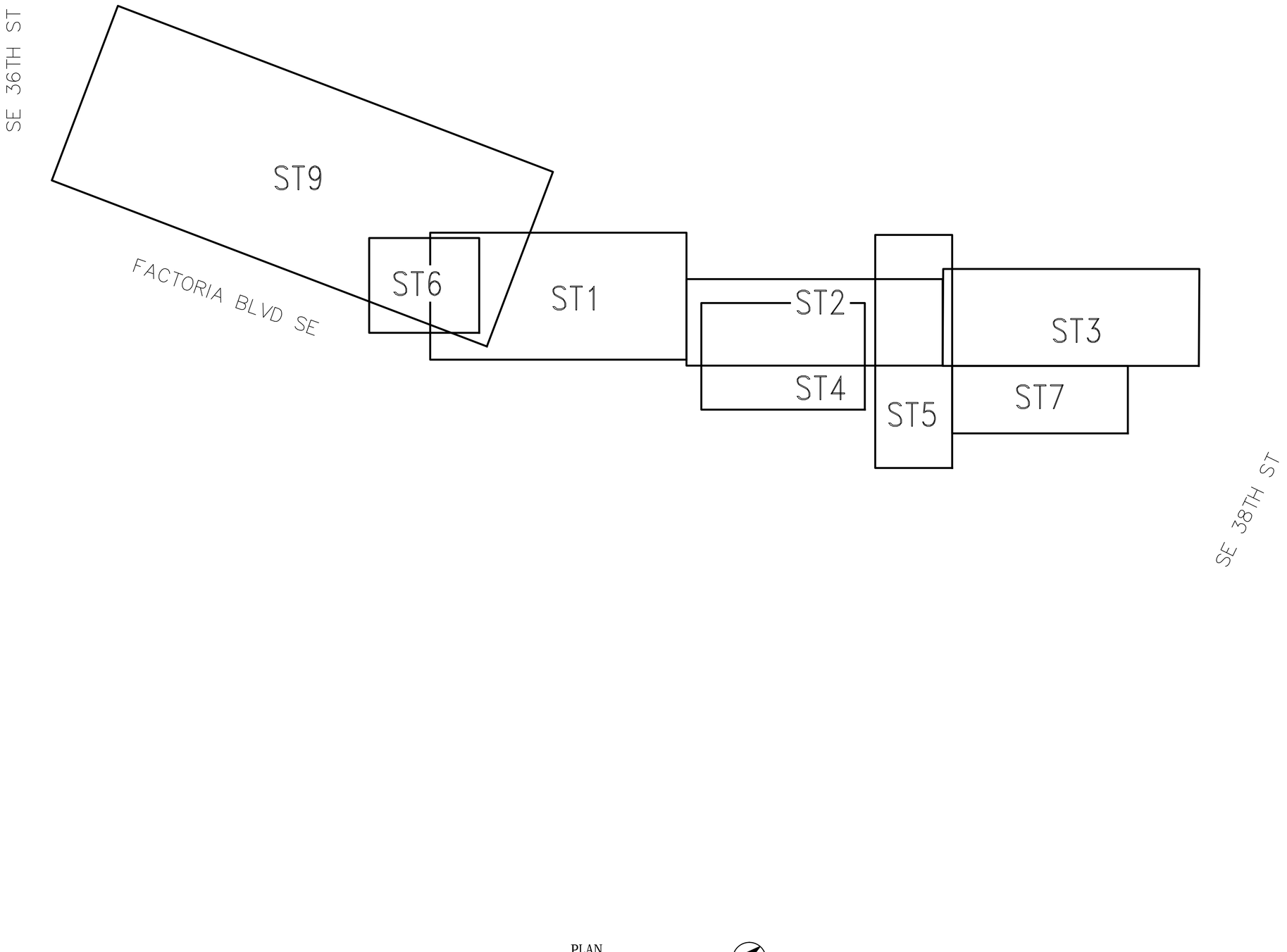
JAY CAMMERMEYER	03/03/20
DESIGNED BY	DATE
JAMES ELLIS	03/03/20
DRAWN BY	DATE
MIKE GISEBURT	03/03/20
CHECKED BY	DATE

City of Bellevue
UTILITIES

FACTORIA BOULEVARD STORM CONVEYANCE IMPROVEMENTS PROJECT
G2 LEGEND, NOTES, AND ABBREVIATIONS

SEC 27, T 25N, R 5E | SHT 2 OF 42

Ellis, James – 3/3/2020 2:42 PM – C:\Users\JEllis\Desktop\30% Submittal\2 G2 LEGEND, NOTES, AND ABBREVIATIONS.dwg



PLAN
KEY MAP
SCALE: 1"=50'

SURVEY NOTES

1. COORDINATES PROVIDED BY CITY OF BELLEVUE FOR HORIZONTAL CONTROL POINTS 1421 AND 2745:

   1421 – N=214222.993 E=1310785.620
   2745 – N=213902.295 E=1310687.399

   ADDITIONAL CONTROL POINTS ESTABLISHED BY CLOSED TRAVERSE. ELEVATIONS ESTABLISHED BY CLOSED LEVEL LOOP.

2. THE UTILITIES SHOWN HEREON ARE BASED ON OBSERVATION OF SURFACE FEATURES, RECORD UTILITY MAPS AND BY PAINT MARKS SET BY A UTILITY LOCATING COMPANY. FIELD LOCATIONS MUST BE VERIFIED PRIOR TO ANY CONSTRUCTION.

3. FIELD SURVEY WAS PERFORMED APRIL 26–MAY 5, 2016. FIELD BOOK 823F, PAGES 38–53 BY REID MIDDLETON, WITH SUPPLEMENTAL SURVEY BY PARAMETRIX IN OCTOBER, 2019.

DATUMS:

HORIZONTAL DATUM: NAD 83/11 WA NORTH

VERTICAL DATUM: NAVD 88

PROJECT BENCHMARK: COB BENCHMARK NO. 693
ELEVATION = 92.502

1"=50' 50 25 0 50 100
Scale Feet

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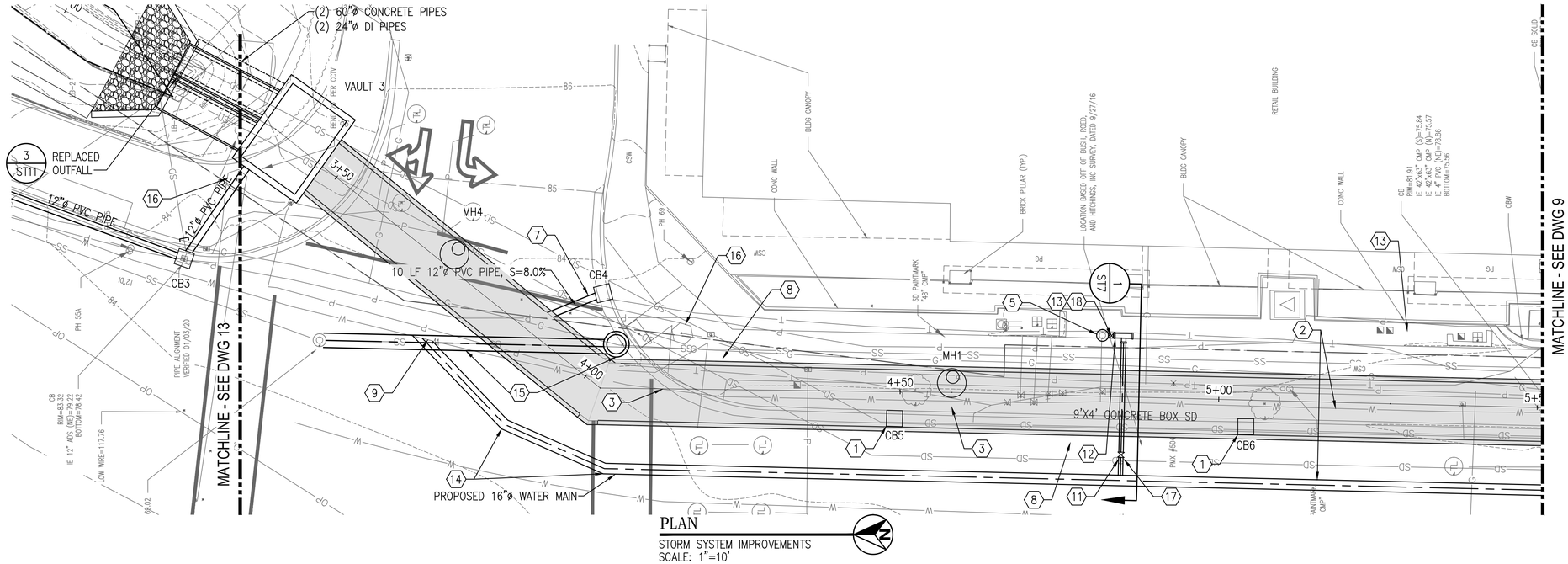
FACTORIA BOULEVARD STORM
CONVEYANCE IMPROVEMENTS PROJECT
G3 KEY MAP

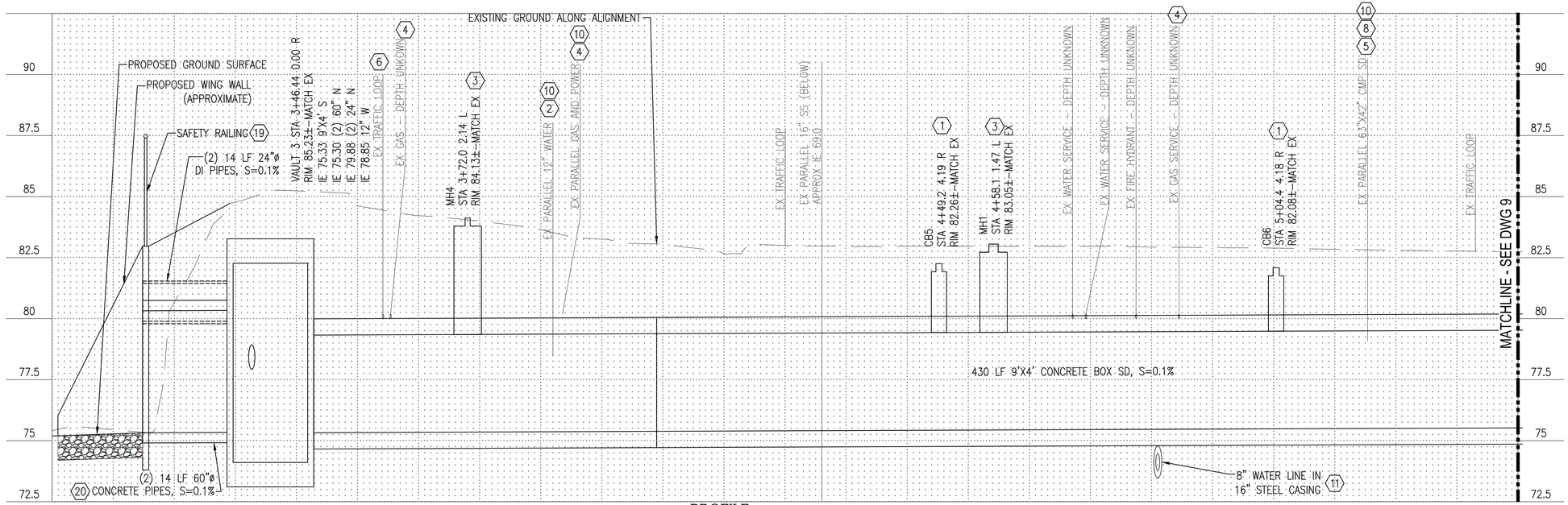
SEC 27, T 25N, R 5E | SHT 3 OF 42

Ellis, James – 3/3/2020 2:42 PM – C:\Users\JEllis\Desktop\30% Submittal\3 G3 KEY MAP – Key map.dwg



PLAN

STORM SYSTEM IMPROVEMENTS
SCALE: 1"=10'



PROFILE

STA 3+06.8 TO 5+45.8
HORIZ SCALE: 1"=10'
VERT SCALE: 1"=2.5'

GENERAL NOTES

1. SEE GENERAL STORMWATER NOTES ON DWG G2.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND POTHOLING ALL UTILITIES NOT PREVIOUSLY POTHOLED WITHIN EXCAVATION LIMITS, WHICH SHALL BE INCIDENTAL TO PIPE BID ITEMS. WHERE ADDITIONAL SITE SPECIFIC POTHOLING IS REQUIRED BY THE PLANS OR REQUESTED BY ENGINEER, IT SHALL BE PAID FOR BY "SITE SPECIFIC POTHOLING".
3. SEE DWG ST8 FOR UTILITY POTHOLE DATA.
4. SEE DWG ST8 FOR STORM STRUCTURE DATA.
5. STATION/OFFSET LOCATION CALLOUTS AND RIM ELEVATIONS PROVIDED ARE AT THE CENTER OF THE DRAINAGE STRUCTURE UNLESS OTHERWISE NOTED.
6. LIMIT DISTURBANCE TO ONLY THOSE AREAS NECESSARY FOR CONSTRUCTING THE PROPOSED IMPROVEMENTS.
7. EXISTING TELECOMM AND CABLE LINES (FIBER OPTIC, COPPER, AND CONDUIT) NOT SHOWN IN PROFILES. TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTES

1. INSTALL COMBINATION INLET AND CONNECT TO BOX CULVERT PER DETAIL 1 ON DWG ST11.
2. REMOVE EXISTING 12" WATER MAIN. REPLACE WITH 16" DI WATER MAIN AS SHOWN ON PLAN.
3. INSTALL 48" ACCESS MANHOLE ON BOX CULVERT PER DETAIL 2 ON DWG ST11.
4. EXISTING GAS AND POWER LINES TO BE RELOCATED BY OTHERS.
5. REPLACE FIRE HYDRANT ASSEMBLY PER COB STD DTL W-13.
6. CONTRACTOR TO RESTORE TRAFFIC LOOP IN KIND.
7. CONNECT 12" SD TO BOX SD.
8. REMOVE AND DISPOSE OF EXISTING STORM PIPE.
9. CUT EXISTING WATER MAIN AND REMOVE PIPE TO SOUTH. CONNECT TO NEW 16" WATER MAIN WITH 45° ELBOW AND 16"X12" REDUCER.
10. PARALLEL UTILITY NOT SHOWN ON PROFILE FOR CLARITY.
11. NEW CASED 8" DIAMETER WATER UNDER NEW STORM BOX. SEE DWG ST7.
12. 8"X6"X6" TEE FOR NEW HYDRANT LINE, PLUGGED TO SOUTH.
13. 6" SERVICE LINE FOR FIRE HYDRANT.
14. 16" 22.5° ELBOW.
15. NEW TEMPORARY SSMH AND CASED 16" DIAMETER SEWER.
16. REMOVE AND REPLACE TRAFFIC SIGNAL.
17. 8" GATE VALVE.
18. 6" GATE VALVE.
19. INSTALL METAL SAFETY RAILING PER COB STD DTL RS-110-1.
20. INSTALL (2) 60" TIDFLEX VALVES, CHECKMATE VALVES, OR EQUIVALENT IN 60" PIPES FOR FISH EXCLUSION.

1"=10' Scale: 10 5 0 10 20 Feet

1"=2.5' Scale: 2.5 1.25 0 2.5 5 Feet

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NO	DATE	BY	APPR	REVISIONS
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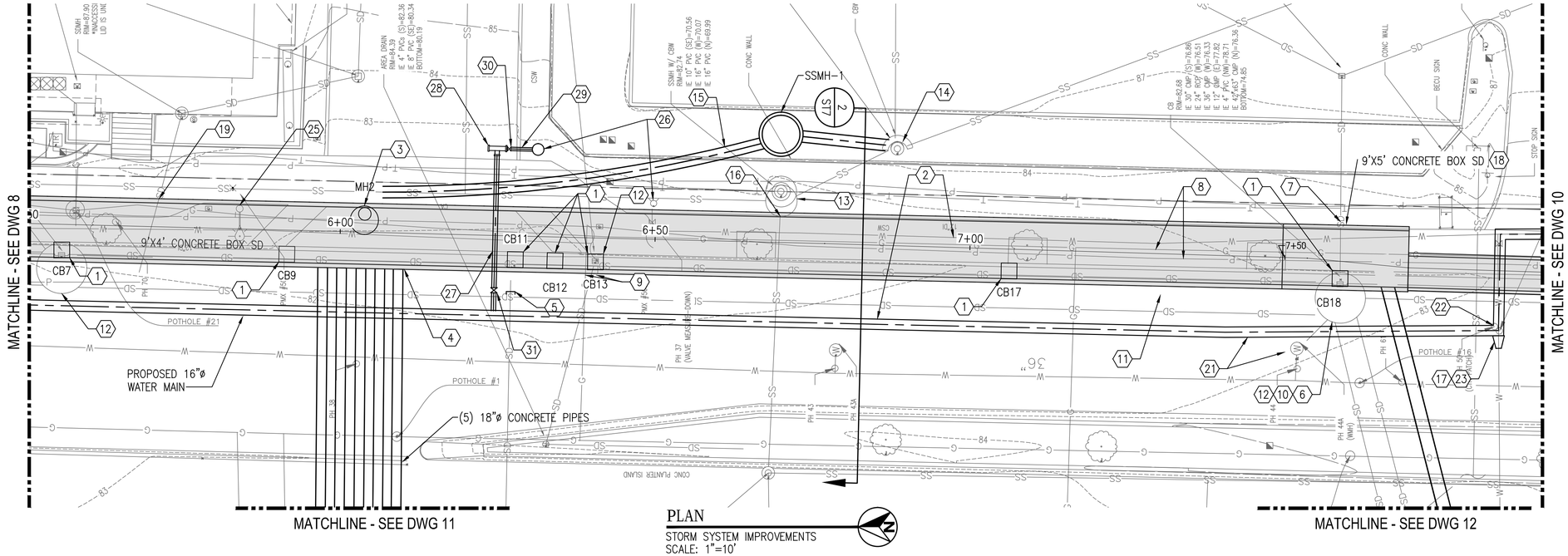
City of Bellevue
UTILITIES

FACTORIA BOULEVARD STORM CONVEYANCE IMPROVEMENTS PROJECT
ST1 STORMWATER TRUNK PLAN AND PROFILE, SHEET 1 OF 3

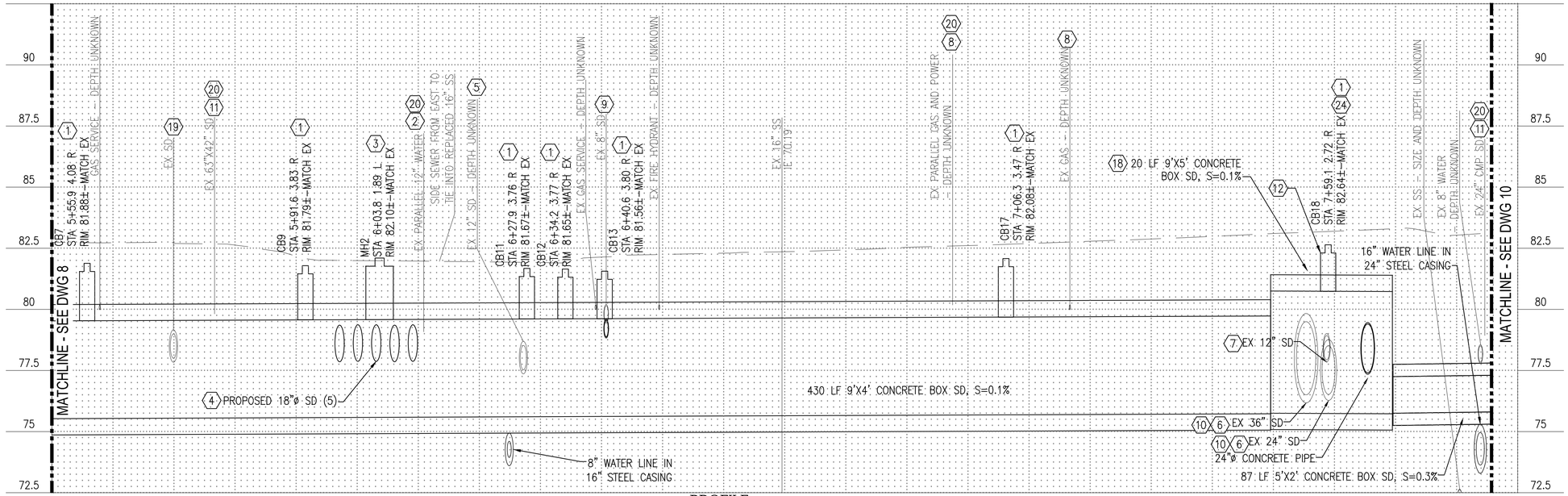
SEC 27, T 25N, R 5E | SHT 8 OF 42

Ellis, James – 3/3/2020 2:42 PM – C:\Users\JEllis\Desktop\30% Submittal\8 ST1 STORMWATER TRUNK PLAN AND PROFILE 1 OF 3.dwg



PLAN

STORM SYSTEM IMPROVEMENTS
SCALE: 1"=10'



PROFILE

STA 5+45.8 TO 7+86.9
HORIZ SCALE: 1"=10'
VERT SCALE: 1"=2.5'

1"=10' Scale: 10 5 0 10 20 Feet

1"=2.5' Scale: 2.5 1.25 0 2.5 5 Feet

GENERAL NOTES

1. SEE GENERAL STORMWATER NOTES ON DWG G2.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND POTHOLING ALL UTILITIES NOT PREVIOUSLY POTHOLED WITHIN EXCAVATION LIMITS, WHICH SHALL BE INCIDENTAL TO PIPE BID ITEMS. WHERE ADDITIONAL SITE SPECIFIC POTHOLING IS REQUIRED BY THE PLANS OR REQUESTED BY ENGINEER, IT SHALL BE PAID FOR BY "SITE SPECIFIC POTHOLING".
3. SEE DWG ST8 FOR UTILITY POTHOLE DATA.
4. SEE DWG ST8 FOR STORM STRUCTURE DATA.
5. STATION/OFFSET LOCATION CALLOUTS AND RIM ELEVATIONS PROVIDED ARE AT THE CENTER OF THE DRAINAGE STRUCTURE UNLESS OTHERWISE NOTED.
6. LIMIT DISTURBANCE TO ONLY THOSE AREAS NECESSARY FOR CONSTRUCTING THE PROPOSED IMPROVEMENTS.
7. EXISTING TELECOMM AND CABLE LINES (FIBER OPTIC, COPPER, AND CONDUIT) NOT SHOWN IN PROFILES. TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTES

1. INSTALL COMBINATION INLET AND CONNECT TO BOX SD PER DETAIL 1 ON DWG ST11.
2. REMOVE EXISTING 12" WATER MAIN. REPLACE WITH 16" DI WATER MAIN AS SHOWN ON PLAN.
3. INSTALL 48" ACCESS MANHOLE ON BOX SD PER DETAIL 2 ON DWG ST11.
4. CONNECT (5) NEW 18" SD TO NEW BOX SD.
5. FILL EXISTING SD WITH CDF AND ABANDON.
6. EXTEND EXISTING 24" AND 36" SD TO CONNECT TO NEW BOX SD.
7. CONNECT EXISTING 12" SD TO NEW BOX SD.
8. EXISTING GAS AND POWER TO BE RELOCATED BY OTHERS.
9. TRIM AS NEEDED AND CONNECT EXISTING STORM DRAIN TO NEW BOX SD. CONTRACTOR TO CONFIRM ELEVATION PRIOR TO CONSTRUCTION AND ADJUST IF NECESSARY.
10. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING SD PIPES PRIOR TO CONSTRUCTING STORM IMPROVEMENTS.
11. REMOVE AND DISPOSE OF EXISTING STORM PIPE.
12. REMOVE AND DISPOSE OF EXISTING STORM STRUCTURE.
13. REMOVE EXISTING SSMH. FILL SS TO SE AND N WITH CDF AND ABANDON IN PLACE.
14. CONNECT NEW SS MAIN TO EXISTING MANHOLE. PLUG AND ABANDON SS TO NW.
15. LAY NEW 16" SS WITH MAXIMUM 5% DEFLECTION TO TRANSITION TO EXISTING ALIGNMENT.
16. EXTEND EXISTING 16" SS AND CONNECT TO NEW SSMH.
17. CUT EXISTING WATER MAIN AND REMOVE PIPE TO EAST. CONNECT TO NEW 16" WATER MAIN WITH 16"X8" REDUCER.
18. INSTALL APPROXIMATELY 20 LF SECTION OF 9'X5' CONCRETE BOX SD TO ALLOW CLEARANCE FOR EXISTING STORM DRAIN CONNECTIONS.
19. TRIM AS NEEDED AND CONNECT EXISTING STORM DRAIN TO NEW BOX SD. SIZE AND DEPTH UNKNOWN, CONTRACTOR TO CONFIRM.
20. PARALLEL UTILITY NOT SHOWN ON PROFILE FOR CLARITY.
21. HORIZONTAL ALIGNMENT PENDING INFORMATION ON SPU ACCESS/BLOW-OFF STRUCTURE.
22. 16"X16"X16" TEE.
23. 16"X8" REDUCER.
24. EXTEND AND CONNECT EXISTING DRAIN LINE FROM SPU MANHOLE. CONTRACTOR TO CONFIRM SIZE AND DEPTH.
25. REMOVE AND REPLACE STREET LIGHT.
26. REPLACE FIRE HYDRANT ASSEMBLY PER COB STD DTL W-13.
27. NEW CASED 8" DIAMETER WATER UNDER NEW STORM BOX.
28. 8"X6"X6" TEE FOR NEW HYDRANT LINE, PLUGGED TO NORTH.
29. 6" SERVICE LINE FOR FIRE HYDRANT.
30. 6" GATE VALVE.
31. 8" GATE VALVE.

CALL 72 HOURS BEFORE YOU DIG 1-800-424-5555

NO	DATE	BY	APPR	REVISIONS
1	03/03/20	JTE	JC	30% DESIGN - NOT FOR CONSTRUCTION

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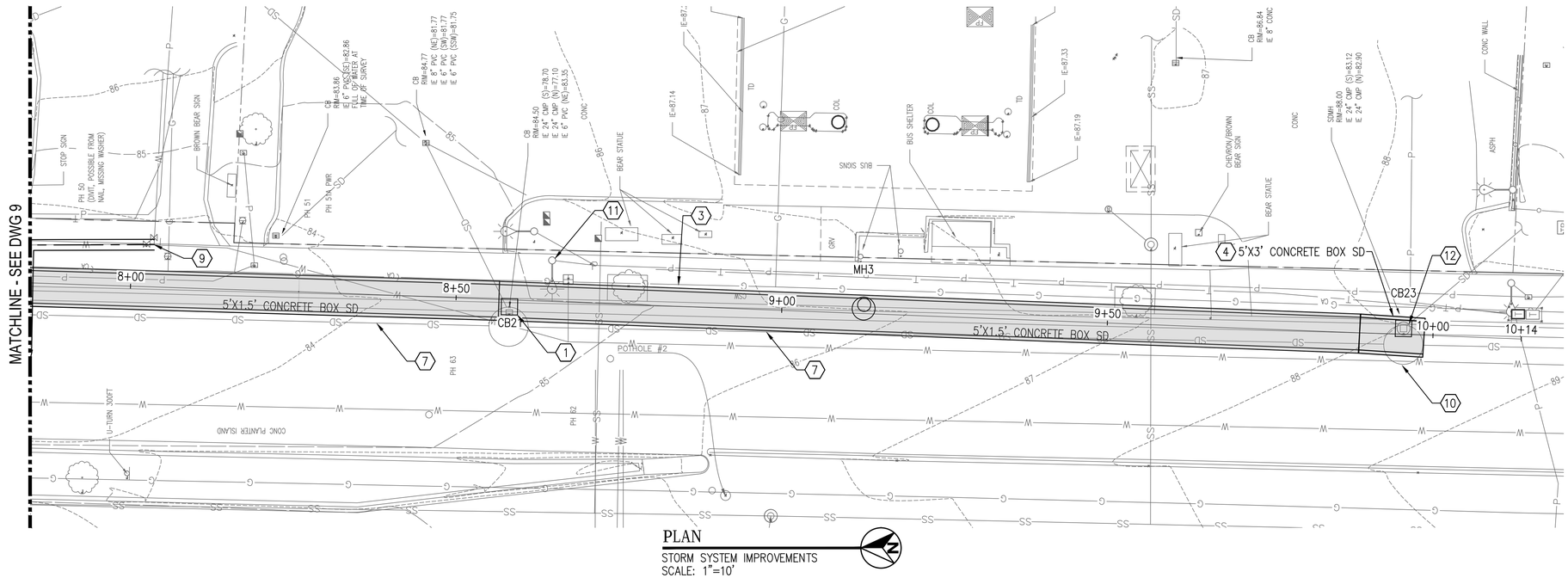
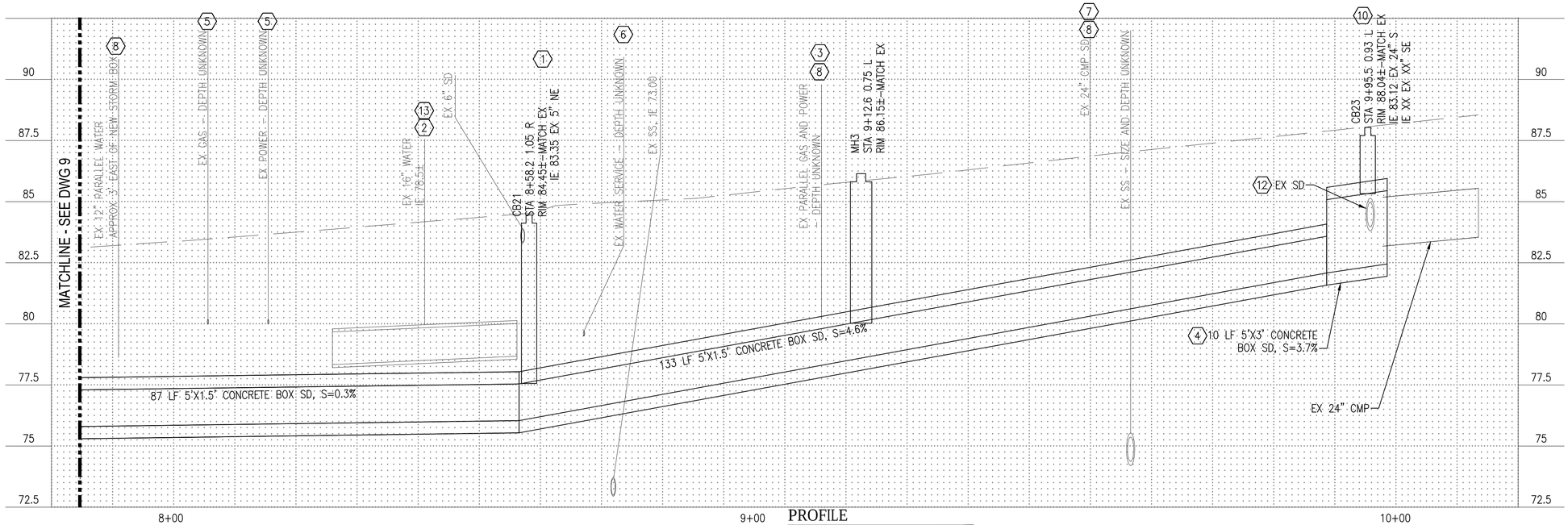
FACTORIA BOULEVARD STORM CONVEYANCE IMPROVEMENTS PROJECT
ST2 STORMWATER TRUNK PLAN AND PROFILE, SHEET 2 OF 3

SEC 27, T 25N, R 5E | SHT 9 OF 42



PLAN

STORM SYSTEM IMPROVEMENTS
SCALE: 1"=10'



PROFILE

STA 7+86.9 TO 10+26.9
HORIZ SCALE: 1"=10'
VERT SCALE: 1"=2.5'

GENERAL NOTES

1. SEE GENERAL STORMWATER NOTES ON DWG G2.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND POTHOLING ALL UTILITIES NOT PREVIOUSLY POTHOLED WITHIN EXCAVATION LIMITS, WHICH SHALL BE INCIDENTAL TO PIPE BID ITEMS. WHERE ADDITIONAL SITE SPECIFIC POTHOLING IS REQUIRED BY THE PLANS OR REQUESTED BY ENGINEER, IT SHALL BE PAID FOR BY "SITE SPECIFIC POTHOLING".
3. SEE DWG ST8 FOR UTILITY POTHOLE DATA.
4. SEE DWG ST8 FOR STORM STRUCTURE DATA.
5. STATION/OFFSET LOCATION CALLOUTS AND RIM ELEVATIONS PROVIDED ARE AT THE CENTER OF THE DRAINAGE STRUCTURE UNLESS OTHERWISE NOTED.
6. LIMIT DISTURBANCE TO ONLY THOSE AREAS NECESSARY FOR CONSTRUCTING THE PROPOSED IMPROVEMENTS.
7. EXISTING TELECOMM AND CABLE LINES (FIBER OPTIC, COPPER, AND CONDUIT) NOT SHOWN IN PROFILES. TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTES

1. REMOVE EXISTING CB AND INSTALL COMBINATION INLET AND CONNECT TO BOX SD PER DETAIL 1 ON DWG ST11. CONNECT EXISTING 6" SD TO NE.
2. PROTECT AND PROVIDE TEMPORARY SUPPORT DURING CONSTRUCTION.
3. EXISTING GAS AND POWER TO BE RELOCATED.
4. INSTALL APPROXIMATELY 10 LF SECTION OF 5'X3' CONCRETE BOX SD TO ALLOW CLEARANCE FOR EXISTING STORM DRAIN CONNECTIONS.
5. EXISTING UTILITY TO BE RELOCATED BY OTHERS.
6. RELOCATE EXISTING WATER SERVICE ABOVE BOX SD.
7. REMOVE AND DISPOSE OF EXISTING STORM PIPE.
8. PARALLEL UTILITY NOT SHOWN ON PROFILE FOR CLARITY.
9. CONNECT NEW WATER AT EXISTING TEE.
10. REMOVE AND DISPOSE OF EXISTING STORM STRUCTURE.
11. PROTECT EXISTING STREET LIGHT.
12. CONTRACTOR TO POTHOLE EXISTING SD AND CONNECT TO NEW BOX SD.
13. INSTALL ETHAFOAM PAD BETWEEN WATER AND STORM.

1"=10' Scale: 10 5 0 10 20 Feet

1"=2.5' Scale: 2.5 1.25 0 2.5 5 Feet

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City of Bellevue
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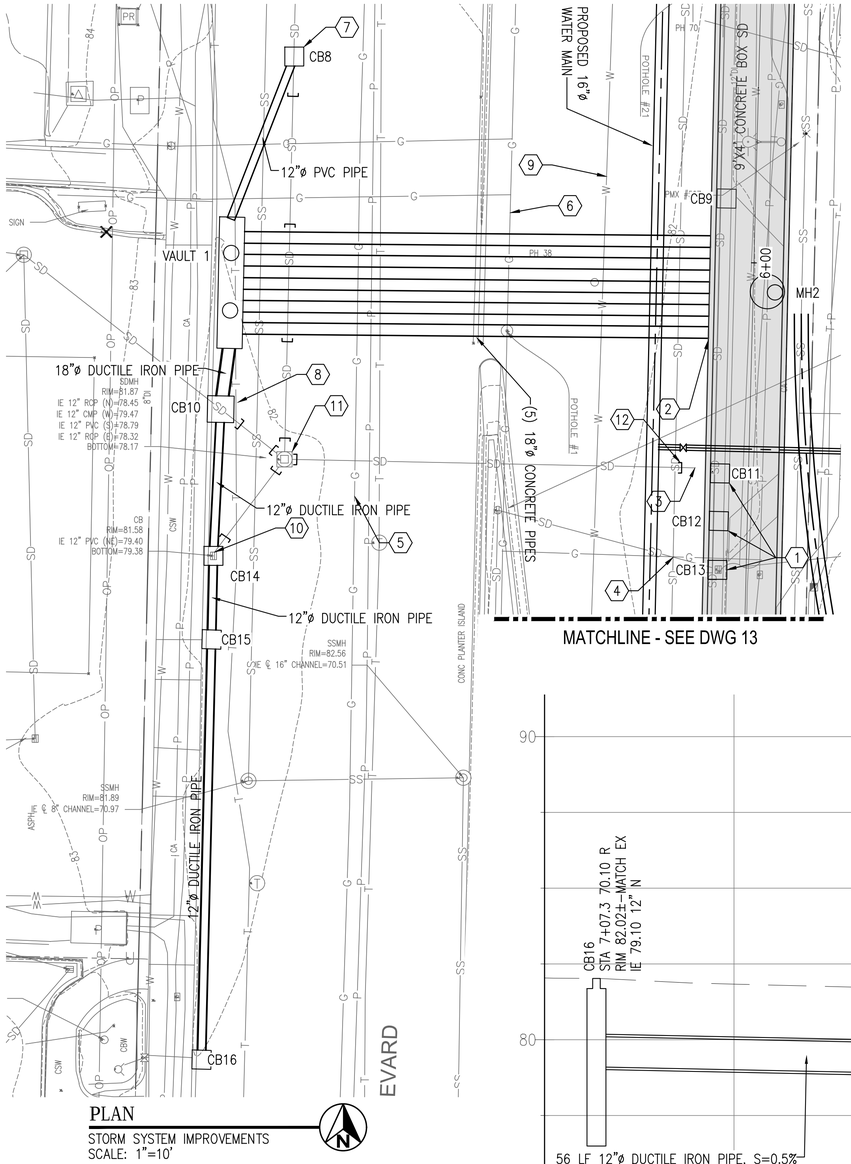
FACTORIA BOULEVARD STORM CONVEYANCE IMPROVEMENTS PROJECT
ST3 STORMWATER TRUNK PLAN AND PROFILE, SHEET 3 OF 3

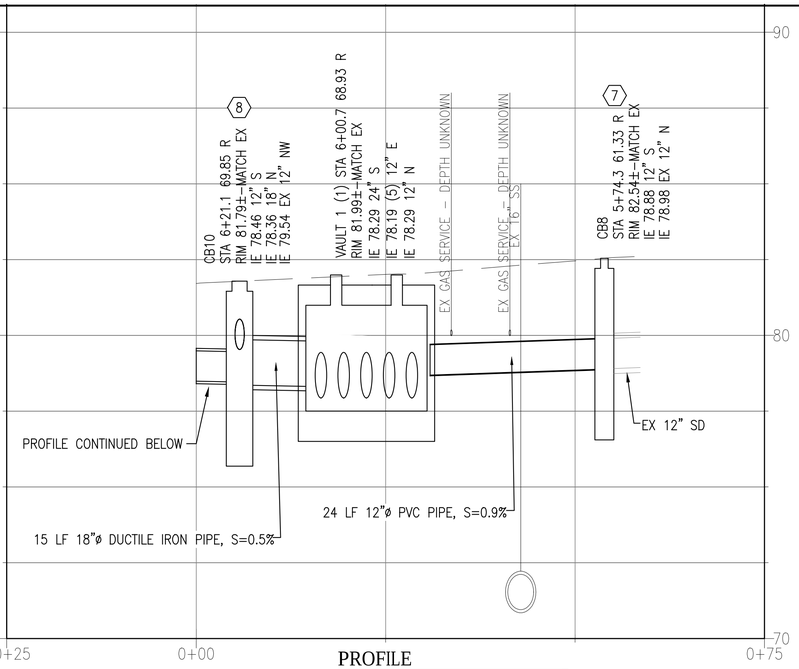
SEC 27, T 25N, R 5E | SHT 10 OF 42

Ellis, James – 3/3/2020 2:43 PM – C:\Users\JEllis\Desktop\30% Submittal\10 ST3 STORMWATER TRUNK PLAN AND PROFILE 3 OF 3.dwg



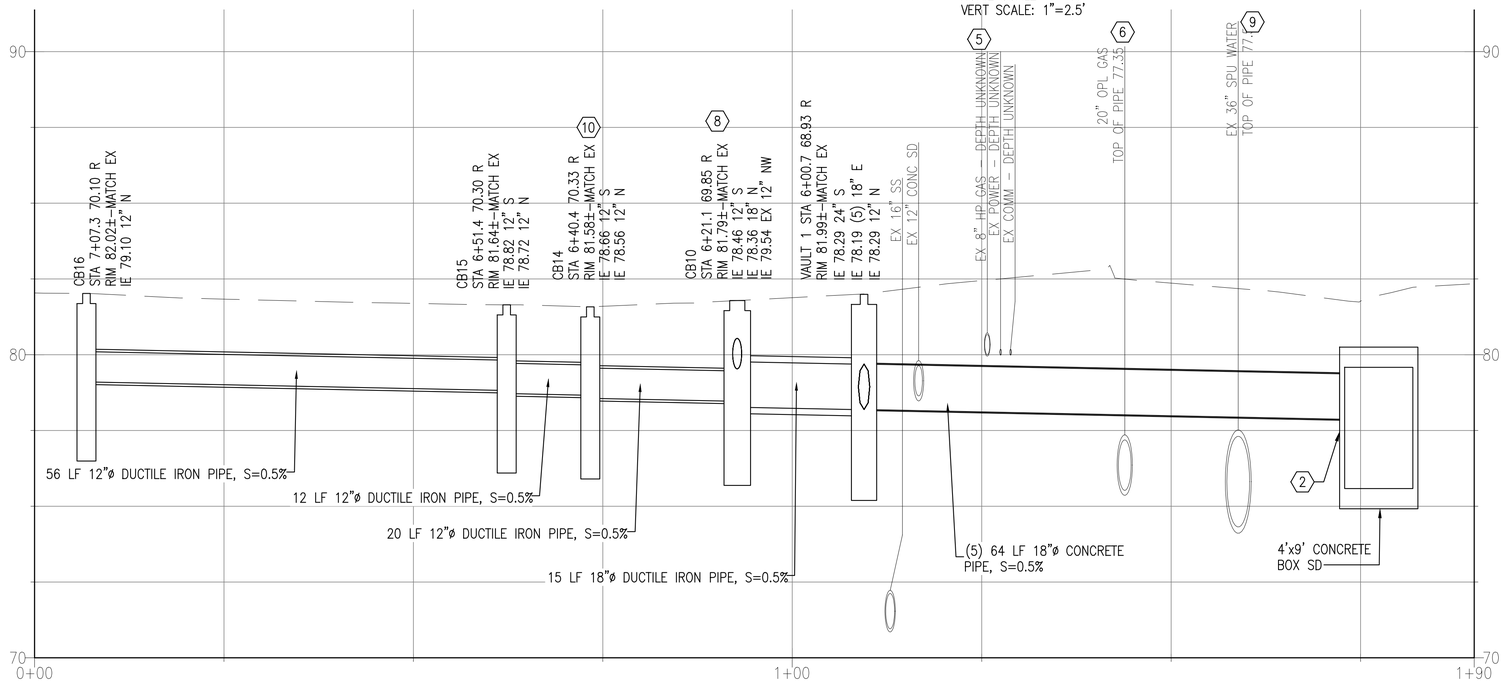
PLAN

STORM SYSTEM IMPROVEMENTS
SCALE: 1"=10'



PROFILE

LATERAL 1 – APPROX STA 6+00
HORIZ SCALE: 1"=10'
VERT SCALE: 1"=2.5'



PROFILE

LATERAL 1 – APPROX STA 6+00
HORIZ SCALE: 1"=10'
VERT SCALE: 1"=2.5'

GENERAL NOTES

1. SEE GENERAL STORMWATER NOTES ON DWG G2.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND POTHOLING ALL UTILITIES NOT PREVIOUSLY POTHOLED WITHIN EXCAVATION LIMITS, WHICH SHALL BE INCIDENTAL TO PIPE BID ITEMS. WHERE ADDITIONAL SITE SPECIFIC POTHOLING IS REQUIRED BY THE PLANS OR REQUESTED BY ENGINEER, IT SHALL BE PAID FOR BY "SITE SPECIFIC POTHOLING".
3. SEE DWG ST8 FOR UTILITY POTHOLE DATA.
4. SEE DWG ST8 FOR STORM STRUCTURE DATA.
5. STATION/OFFSET LOCATION CALLOUTS AND RIM ELEVATIONS PROVIDED ARE AT THE CENTER OF THE DRAINAGE STRUCTURE UNLESS OTHERWISE NOTED.
6. LIMIT DISTURBANCE TO ONLY THOSE AREAS NECESSARY FOR CONSTRUCTING THE PROPOSED IMPROVEMENTS.
7. ALL STRUCTURE STATION AND OFFSET CALLOUTS ARE RELATIVE TO THE MAIN TRUNK ALIGNMENT.
7. EXISTING TELECOMM AND CABLE LINES (FIBER OPTIC, COPPER, AND CONDUIT) NOT SHOWN IN PROFILES. TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTES

1. INSTALL COMBINATION INLET AND CONNECT TO BOX CULVERT PER DETAIL 1 ON DWG ST11.
2. CONNECT (5) NEW 18" SD PIPES TO BOX CULVERT.
3. EXISTING 12" SD TO REMAIN. CORE DRILL AND EXTEND TO CONNECT TO NEW BOX CULVERT. CONTRACTOR TO CONFIRM ELEVATION PRIOR TO CONSTRUCTION.
4. CORE DRILL AND EXTEND TO CONNECT TO NEW BOX CULVERT. CONTRACTOR TO CONFIRM ELEVATION PRIOR TO CONSTRUCTION AND ADJUST IF NECESSARY.
5. EXISTING 8" HIGH PRESSURE GAS. CONTRACTOR TO PROTECT AND PROVIDE TEMPORARY SUPPORT DURING CONSTRUCTION. USE EXTREME CAUTION DUE TO SAFETY HAZARD.
6. EXISTING 20" OPL GAS LINE. CONTRACTOR TO PROTECT AND PROVIDE TEMPORARY SUPPORT DURING CONSTRUCTION. USE EXTREME CAUTION DUE TO SAFETY HAZARD.
7. CONNECT EXISTING PIPE TO NORTH TO NEW CB. REMOVE PIPE TO SOUTH AS NEEDED FOR CONSTRUCTION, AND FILL REMAINDER WITH CDF AND ABANDON.
8. CONNECT EXISTING PIPE TO NORTHWEST TO NEW CB. FILL PIPE TO SOUTHEAST WITH CDF AND ABANDON.
9. EXISTING 36" SPU WATER MAIN. CONTRACTOR TO PROTECT AND AVOID DISTURBANCE TO PIPE AND BEDDING DURING CONSTRUCTION.
10. REMOVE AND REPLACE EXISTING CATCH BASIN. FILL PIPE TO NORTHEAST WITH CDF AND ABANDON.
11. REMOVE EXISTING CATCH BASIN. FILL ALL CONNECTING PIPES WITH CDF AND ABANDON.
12. FILL PIPE WITH CDF AND ABANDON.

1"=10' Scale: 10 5 0 10 20 Feet

1"=2.5' Scale: 2.5 1.25 0 2.5 5 Feet

CALL 72 HOURS BEFORE YOU DIG 1-800-424-5555

NO	DATE	BY	APPR	REVISIONS
1	03/03/20	JTE	JC	30% DESIGN – NOT FOR CONSTRUCTION

Louis Berger
520 Pike St, Ste 1005, Seattle, WA 98101 · 206.453.1043

30% SUBMITTAL

Approved By

DESIGN MANAGER DATE

PROJECT MANAGER DATE

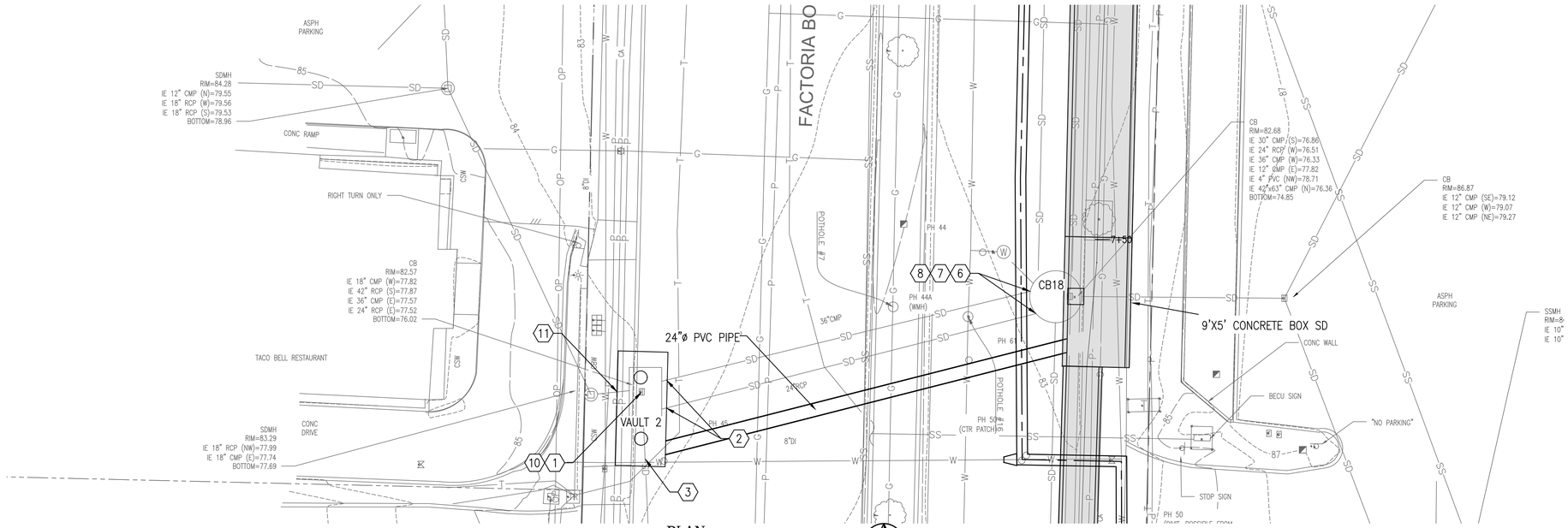
JAY CAMMERMEYER	03/03/20
DESIGNED BY	DATE
JAMES ELLIS	03/03/20
DRAWN BY	DATE
MIKE GISEBURT	03/03/20
CHECKED BY	DATE

City of Bellevue
UTILITIES

FACTORIA BOULEVARD STORM CONVEYANCE IMPROVEMENTS PROJECT
ST4 STORMWATER LATERAL PLAN AND PROFILE 1 OF 3

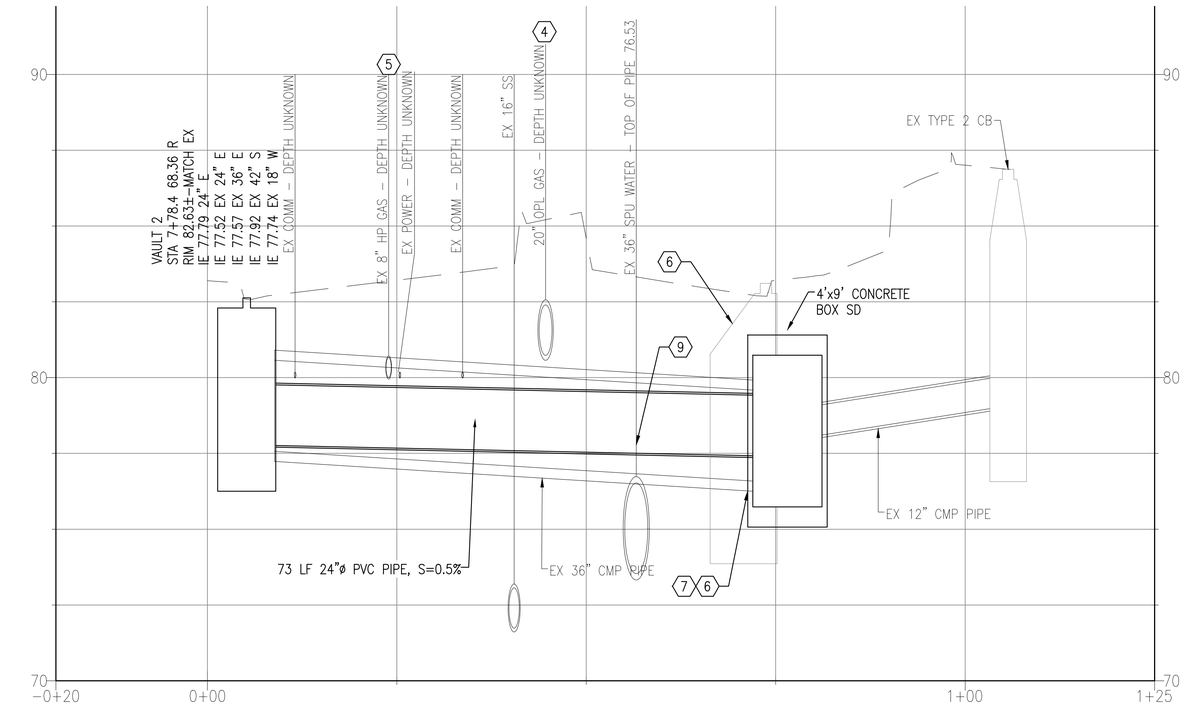
SEC 27, T 25N, R 5E | SHT 11 OF 42

Ellis, James – 3/3/2020 2:43 PM – C:\Users\JEllis\Desktop\30% Submittal\11 ST4 STORMWATER LATERAL PLAN AND PROFILE 1 OF 3.dwg



PLAN

STORM SYSTEM IMPROVEMENTS
SCALE: 1"=10'



PROFILE

LATERAL 2 – APPROX STA 7+60
HORIZ SCALE: 1"=10'
VERT SCALE: 1"=2.5'

GENERAL NOTES

1. SEE GENERAL STORMWATER NOTES ON DWG G2.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND POTHOLING ALL UTILITIES NOT PREVIOUSLY POTHOLED WITHIN EXCAVATION LIMITS, WHICH SHALL BE INCIDENTAL TO PIPE BID ITEMS. WHERE ADDITIONAL SITE SPECIFIC POTHOLING IS REQUIRED BY THE PLANS OR REQUESTED BY ENGINEER, IT SHALL BE PAID FOR BY "SITE SPECIFIC POTHOLING".
3. SEE DWG ST8 FOR UTILITY POTHOLE DATA.
4. SEE DWG ST8 FOR STORM STRUCTURE DATA.
5. STATION/OFFSET LOCATION CALLOUTS AND RIM ELEVATIONS PROVIDED ARE AT THE CENTER OF THE DRAINAGE STRUCTURE UNLESS OTHERWISE NOTED.
6. LIMIT DISTURBANCE TO ONLY THOSE AREAS NECESSARY FOR CONSTRUCTING THE PROPOSED IMPROVEMENTS.
7. ALL STRUCTURE STATION AND OFFSET CALLOUTS ARE RELATIVE TO THE MAIN TRUNK ALIGNMENT.
7. EXISTING TELECOMM AND CABLE LINES (FIBER OPTIC, COPPER, AND CONDUIT) NOT SHOWN IN PROFILES. TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTES

1. REMOVE EXISTING CB AND REPLACE WITH NEW 6' W X 16' L X 6.5' H VAULT.
2. CONNECT EXISTING 24" AND 36" SD TO NEW VAULT.
3. CIONNECT EXISTING 42" SD TO NEW VAULT.
4. EXISTING 20" OPL GAS LINE. CONTRACTOR TO PROTECT AND PROVIDE TEMPORARY SUPPORT DURING CONSTRUCTION. USE EXTREME CAUTION DUE TO SAFETY HAZARD.
5. EXISTING 8" HIGH PRESSURE GAS. CONTRACTOR TO PROTECT AND PROVIDE TEMPORARY SUPPORT DURING CONSTRUCTION. USE EXTREME CAUTION DUE TO SAFETY HAZARD.
6. CORE DRILL AND EXTEND EXISTING 24" AND 36" SD TO CONNECT TO NEW BOX SD.
7. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING SD PIPES PRIOR TO CONSTRUCTING STORM IMPROVEMENTS.
8. REMOVE AND DISPOSE OF EXISTING STORM STRUCTURE.
9. ELEVATION OF SPU WATER MAIN BASED ON POTHOLE 16. DUE TO CONFLICT WITH EXISTING STORM DEPTH WILL BE VERIFIED WITH ADDITIONAL POTHOLES.
10. PRELIMINARY ARRANGEMENT OF NEW STORM STRUCTURE PENDING INFORMATION ON CITY WATER LINE AND FRANCHISE UTILITIES.
11. CONNECT EXISTING 18" SD TO NEW VAULT.

1"=10' Scale: 10 5 0 10 20 Feet

1"=2.5' Scale: 2.5 1.25 0 2.5 5 Feet

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FACTORIA BOULEVARD STORM
CONVEYANCE IMPROVEMENTS PROJECT
ST5 STORMWATER LATERAL PLAN AND PROFILE 2 OF 3

SEC 27, T 25N, R 5E | SHT 12 OF 42

Ellis, James – 3/3/2020 2:44 PM – C:\Users\JEllis\Desktop\30% Submittal\12 ST5 STORMWATER LATERAL PLAN AND PROFILE 2 OF 3.dwg